

#### COMMONWEALTH OF MASSACHUSETTS

## Board of Registration of Hazardous Waste Site Cleanup Professionals

ONE WINTER STREET, 3rd Floor BOSTON, MA 02108 617-292-5629

### APPROVED CONTINUING EDUCATION COURSES AND CONFERENCES AS OF FEBRUARY 27, 2019

The following list contains information about all of the courses and conferences that the Board has approved as of the date listed above. This list is updated monthly. If you would like to obtain a subsequent edition of this list, it is accessible on our website: <a href="http://www.state.ma.us/lsp">http://www.state.ma.us/lsp</a>. If you cannot access the website, please contact LSP staff member Richard Friend at the above address or phone number.

Please note that in approving a continuing education course about a particular remediation technology or method, the Board is not endorsing or recommending the use of that technology or method.

NOTE: There are three lists on the following pages:

List #1. Upcoming approved courses and conferences that Board staff is informed of;

List #2. Approved courses and conferences that may be offered at some point in the future;

List #3. Courses and conferences no longer being offered.

#### THE COURSES ON LISTS 2 & 3 ARE ARRANGED ALPHABETICALLY BY THE PROVIDER

**NOTES CONCERNING COURSE NUMBERS ENDING IN A LETTER "a", "b", etc.** Course numbers ending in a letter (e.g., 1071a) indicate courses that have been slightly altered from the initial presentation. Credit toward renewal of license will be given once for each course number, disregarding the letter suffix. Please note, this does not apply to the 1417 series of online webinars, designated with capital letters A through T.

## LIST #1. UPCOMING SCHEDULE OF APPROVED COURSES.

| Board's       | Course Name  | Presented By              | Credit    | Category                                   | Contact Information               | Course Date(s)        | Location                                     |
|---------------|--|---------------------------|-----------|--|-----------------------------------|-----------------------|--|
| Course<br>No. |  |                           | s<br>(Cr) | R= regulatory T= technical DEP= DEP course |                                   |                       |  |
| 1203          | Field Screening Petroleum Hydrocarbons<br>Using Ultraviolet Fluorescence Technology                    | LSPA                      | 4         | Т  | www.lspa.org                      | March 14, 2019        | Hilton Double Tree<br>Andover, MA            |
| 1652          | Hands On 2D and 3D Environmental Data<br>Visualization   | LSPA                      | 4         | Т  | www.lspa.org                      | March 14, 2019        | Hilton Double Tree<br>Andover, MA            |
| 1647          | Facility Roundtable: Managing<br>Remediation and Hazardous Waste                                       | LSPA                      | 4         | Т  | www.lspa.org                      | March 19, 2019        | Hilton Double<br>Tree, Westboro,<br>MA       |
| 1653          | Proposed MCP Amendments  | MassDEP                   | 1.5       | R  | www.lspa.org                      | March 19, 2019        | Hilton Double<br>Tree, Westboro,<br>MA       |
| 1464          | Horizontal Remediation Wells for<br>Improved Site Cleanup  | EPOC                      | 8         | Т  | https://www.epoc.org              | March 27, 2019        | CTCPA Education<br>Center,<br>Rocky Hill, CT |
| 1607          | Introduction to New England<br>Hydrogeology  | GeoPractical              | 8         | Т  | www.geopractical.com              | March 27, 2019        | Windsor, CT                                  |
| 1590a         | Introduction to Groundwater Modeling   | GeoPractical              | 6         | Т  | www.geopractical.com              | March 28, 2019        | Windsor, CT                                  |
| 1424          | In-Situ Chemical Oxidation (ISCO)  | LSPA                      | 4         | Т  | www.lspa.org                      | April 1, 2019         | Crowne Plaza<br>Hotel<br>Natick, MA          |
| 1476          | Air and Soil Gas Sample Collection and<br>Analysis: How to Collect Relevant and<br>Representative Data | LSPA                      | 4         | Т  | www.lspa.org                      | April 1, 2019         | Crowne Plaza<br>Hotel<br>Natick, MA          |
| 1658          | The Use of Equilibrium Passive Sampling for Environmental Investigations                               | SETAC                     | 4         | Т  | http://nacsetac.org/              | April 8, 2019         | UMASS Boston                                 |
| 1660          | Applied Groundwater Modeling with Visual MODFLOW Flex  | Waterloo<br>Hydrogeologic | 21        | Т  | www.waterloohydrogeologic.co<br>m | April 9 – 11,<br>2019 | Synergy<br>Environmental<br>Royersford, PA   |
| 1553          | Introduction to Measuring and Interpreting Fluxes Between Groundwater and Surface Water                | GeoPractical              | 8         | Т  | www.geopractical.com              | April 11, 2019        | Windsor, CT                                  |
| 1553          | Introduction to Measuring and Interpreting Fluxes Between Groundwater and Surface Water                | GeoPractical              | 8         | Т  | www.geopractical.com              | April 24, 2019        | Harvard, MA                                  |

|       | Bedrock Characterization for   |                                 |     |       |  |                |                             |
|-------|--|---------------------------------|-----|-------|--|----------------|-----------------------------|
| 1570  | Hydrogeologic Evaluation in Eastern New England  | GeoPractical                    | 8   | T     | www.geopractical.com   | April 25, 2019 | Harvard, MA                 |
| 1436  | Pioneer Valley's Post-Glacial Landscape  | GeoPractical                    | 8   | T     | www.geopractical.com   | April 29, 2019 | Harvard, MA                 |
| 1623  | Geochemical Consequences of Landfill<br>Impacts- From Data Analysis to Conceptual<br>Model   | GeoPractical                    | 8   | Т     | www.geopractical.com   | May 14, 2019   | Amherst, MA                 |
| 1518a | Exposure Point Concentrations and You:<br>Calculating 95% UCLs and Employing<br>ProUCL to Compute Them for Use as EPCs   | LSPA                            | 8   | Т     | www.lspa.org   | May 22, 2019   | Hilton Hotel<br>Woburn, MA  |
| 1494  | Method 3 Risk Characterization: A Short<br>Course for LSPs   | LSPA                            | 6   | T     | www.lspa.org   | June 4, 2019   | Holiday Inn,<br>Taunton, MA |
| 1648  | Managing Construction in Contamination<br>Areas  | DEP                             | 2   | DEP-R | www.lspa.org   | Anytime        | Online                      |
| 1034a | The Environmental Sampling E-Course  | Nielsen<br>Environmental        | 32  | T     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1035a | The Complete Ground-Water Monitoring E-Course  | Nielsen<br>Environmental        | 38  | T     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1038a | The Ground-Water Monitoring Well Design, Construction & Development E- Course  | Nielsen<br>Environmental        | 16  | Т     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1039a | The Complete Ground-Water Sampling E-Course  | Nielsen<br>Environmental        | 25  | T     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1201a | The Soil Sampling for Volatile Organic<br>Compounds E-Course   | Nielsen<br>Environmental        | 8   | T     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1571  | The Complete Soil Sampling E-Course  | Nielsen<br>Environmental        | 18  | Т     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1574  | The Low-Flow Purging and Sampling and No-Purge Sampling E-Course   | Nielsen<br>Environmental        | 15  | T     | www.envirofieldschool.com  | Anytime        | Online                      |
| 1417A | Boring Logs: Making Soil Descriptions<br>That Are Complete, Accurate, & Effective  | Midwest<br>GeoSciences<br>Group | 1.5 | Т     | Dan Kelleher, 763-607-0092 <a href="http://www.midwestgeo.com/malsp.php">http://www.midwestgeo.com/malsp.php</a> MA LSP Promo Code: MALSP-79 | Anytime        | Online                      |
| 1417B | Rock Core Logging for Hydrogeologic<br>Projects: Assessing Recovery, RQD,<br>Fractures and Statigraphy   | Midwest<br>GeoSciences<br>Group | 1.5 | Т     | Dan Kelleher, 763-607-0092 <a href="http://www.midwestgeo.com/malsp.php">http://www.midwestgeo.com/malsp.php</a> MA LSP Promo Code: MALSP-79 | Anytime        | Online                      |
| 1417C | Hydrogeology of Aquitards and Low-<br>Permeability Materials, Part 1: Analyzing<br>Aquitard Integrity for Water Resourses<br>Protection and Contaminated Sites | Midwest<br>GeoSciences<br>Group | 1.5 | Т     | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime        | Online                      |

| 1417D | Hydrologeology of Aquitards and Low-<br>Permeability Materials, Part 2: Analyzing<br>Head Distributions and Vertical Hydraulic<br>Gradients  | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
|-------|--|---------------------------------|-----|---|--|---------|--------|
| 1417E | Ethics for Geologists and Engineers:<br>Realizations of Everyday Decisions and<br>Common Behaviors.  | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417F | Slug Testing for Site Characterization:<br>Practical Guidelines for Improving<br>Efficiency and Accuracy                                     | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092 <a href="http://www.midwestgeo.com/malsp.php">http://www.midwestgeo.com/malsp.php</a> MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417G | Pumping Tests for Aquifer Evaluation Part 1: Some Practical Guidelines to Get More from your Test Data                                       | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417H | Pumping Tests for Aquifer Evaluation Part 2: Fundamentals of Pumping Test Interpretation   | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417I | Pumping Tests for Aquifer Evaluation Part 3: Understanding Well Hydraulics through Step Tests  | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417J | Pumping Tests for Aquifer Evaluation Part 4: Handling Data from Tests with Variable Pumping Rates and Interpreting Recovery Test Data        | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417K | Anaerobic Attenuation of Petroleum<br>Contamination: Advances and New Trends<br>in Measuring Natural Attenuation                             | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092 <a href="http://www.midwestgeo.com/malsp.php">http://www.midwestgeo.com/malsp.php</a> MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417L | Environmental Forensics and Chemical<br>Fingerprinting: Assessing Anaytical<br>Methods and Understanding Hydrocarbon<br>Chemistry            | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417M | Glacial Sequences Part 1: Deciphering<br>Stratigraphy and Depositional<br>Environments   | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |
| 1417N | Glacial Sequences Part II: Understanding the Effects of Post-Depositional Weathering: Development of Weathering Zones and Secondary Jointing | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79   | Anytime | Online |

| 1417O | Managing Unanticipated Subsurface<br>Conditions in the Field: Confident<br>Characterizations When Budgets Matter<br>Most | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
|-------|--|---------------------------------|-----|---|--|---------|--------|
| 1417P | Pharmaceuticals in Ground Water:<br>Understanding the Environmental Fate of<br>Drugs in the Water                        | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417Q | LNAPL Transmissivity as a Metric: The Future in Tracking LNAPL Recovery Progress   | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417R | Understanding LNAPL in Fine Grained<br>Soil: Convention, Misconceptions and New<br>Advances                              | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417S | Karst Characterization using Geophysics,<br>Part 1: Effective Geophysical Methods for<br>Karst                           | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1417T | Karst Characterization using Geophysics,<br>Part 2: Do's and Don'ts Through Case<br>Histories and Examples               | Midwest<br>GeoSciences<br>Group | 1.5 | Т | Dan Kelleher, 763-607-0092<br>http://www.midwestgeo.com/mal<br>sp.php<br>MA LSP Promo Code: MALSP-79 | Anytime | Online |
| 1404a | Pneumatic Slug Testing   | Ram's Horn                      | 4   | T | www.vgwacademy.com   | Anytime | Online |
| 1441  | Determining Hydraulic Conductivity While Low Flow Sampling   | Ram's Horn                      | 4   | T | www.vgwacademy.com   | Anytime | Online |
| 1463  | Virtual Ground Water Academy: Slug<br>Testing Course   | Ram's Horn                      | 4   | T | www.vgwacademy.com   | Anytime | Online |
| 1635  | Visual Sample Plan (VSP) Online<br>Training  | VSP Training<br>LLC             | 32  | T | https://vsp-<br>training.teachable.com   | Anytime | Online |

# LIST #2. COURSES LISTED BELOW ARE APPROVED TO BE OFFERED AT ANY TIME. TO INQUIRE ABOUT POTENTIAL OFFERING DATES, TIMES, AND LOCATIONS, PLEASE CONTACT THE PERSON LISTED FOR EACH COURSE. THE COURSES ARE ARRANGED ALPHABETICALLY BY THE PRESENTER.

| Board's<br>Course | Course Name  | Presented By    | Credits<br>(Cr) | Category<br>R= regulatory    | Contact                |
|-------------------|--|-----------------|-----------------|------------------------------|------------------------|
| No.               |  |                 |                 | T= technical DEP= DEP course |                        |
| 1318              | Geophysical Site Investigation                                 | AEG             | 8               | T                            | www.aegweb.org         |
| 1223              | Annual International Conference on Soils, Sediments, and Water | AEHS Foundation | various         | T                            | www.aehsfoundation.org |

| Board's<br>Course<br>No. | Course Name   | Presented By                            | Credits<br>(Cr) | Category R= regulatory T= technical DEP= DEP course | Contact                                     |
|--------------------------|---|---|-----------------|---|---|
|                          | (UMass Soils Conference   |   |                 |   |   |
| 1432                     | Optimizing Site Assessment and Remediation to Expedite Site Closure                         | AMEC                                    | 9               | Т   | Nathan Hagelin (207) 828-3508               |
| 1509                     | Air Sparging & Soil Vapor Extraction  | ARCADIS                                 | 5.5             | T   | www.arcadis-us.com                          |
| 1510                     | Monitored Natural Attenuation   | ARCADIS                                 | 5.5             | T   | www.arcadis-us.com                          |
| 1164                     | Wetlands, Wetland Regulations and the MCP   | Assoc. of Mass Wetland Scientists/LSPA  | 8               | R   | William Kuriger (978) 667-4340              |
| 1288                     | International In Situ and On-Site Bioremediation Symposium                                  | Battelle                                | 50%             | T   | www.battelle.org                            |
| 1495                     | International Conference on Remediation of Chlorinated and Recalcitrant Compounds           | Battelle                                | various         | Т   | www.battelle.org                            |
| 1520                     | Eighth International Conference on Remediation and Management of Contaminated Sediments     | Battelle                                | various         | Т   | www.battelle.org                            |
| 1589                     | Ninth International Conference on Remediation and Management of Contaminated Sediments      | Battelle                                | various         | Т   | www.battelle.org                            |
| 1600                     | Fourth International Symposium on Bioremediation and Sustainable Environmental Technologies | Battelle                                | various         | Т   | www.battelle.org                            |
| 1651                     | Tenth International Conference on Remediation and Management of Contaminated Sediments      | Battelle                                | various         | Т   | www.battelle.org                            |
| 1559                     | Return on Remediation Investments (RORI) For TCE Mass Flux Reduction                        | Cascade Technical<br>Services           | 6               | Т   | Rob Danckert (978) 495-6808                 |
| 1650                     | The Dynamic Earth   | Central Connecticut<br>State University | 8               | Т   | Admissions 860-832-2278 admissions@ccsu.edu |
| 1492                     | Obtaining A Brownfields: Why You May Be Closer Than You Think                               | Cherrytree Group                        | 2               | Т   | www.cherrytree-group.com                    |
| 1530                     | Developing a Brownfields Site: Building a Toolkit for Success                               | Cherrytree Group                        | 3               | T   | www.cherrytree-group.com                    |
| 1474                     | FEFLOW Introduction to Groundwater Modeling   | DHI Academy                             | 33              | Т   | Barbara White bwh@dhigroup.com              |
| 1422                     | Managing Construction Activities at Disposal Sites  | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1423                     | Meeting MCP Requirements for Ecological Risk Assessment                                     | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1429                     | Downgradient Property Status  | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1434                     | Strategies for Tackling Brownfield's Redevelopment Challenges                               | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1444                     | Vapor Intrusion   | DEP                                     | 1               | DEP-R   | www.lspa.org                                |
| 1447                     | Regulatory Overview of MCP Remediation Waste Management                                     | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1449                     | Risk Assessment, Risk Management and the Significance of the Risk                           | DEP                                     | 2               | DEP-R   | www.lspa.org                                |
| 1455                     | Sighting Renewable Energy in Contaminated Land in Massachusetts                             | DEP                                     | 4               | DEP-R   | www.lspa.org                                |
| 1470                     | Incremental Sampling Methodology  | DEP                                     | 1               | DEP-R   | www.lspa.org                                |

| 1471 | An Overview of Proposed Amendments to the Massachusetts   | DEP | 1   | DEP-R | www.lspa.org                 |
|------|---|-----|-----|-------|------------------------------|
| 1472 | Contingency Plan  Demystifying the Audit Process  | DEP | 1   | DEP-R | www.lspa.org                 |
| 1472 | Characterization of #2 Fuel Oil Spills  | DEP | 2   | DEP-R | www.lspa.org<br>www.lspa.org |
| 1489 | Enforcement Under Chapter 21  | DEP | 1   | DEP-R | www.lspa.org<br>www.lspa.org |
| 1499 | PCE and TCE Toxicity and Risk-Based Value Updates   | DEP | 1   | DEF-R | www.lspa.org<br>www.lspa.org |
| 1505 | MassDEP VPH, EPH, and APH Methods Workshop  | DEP | 4   | DEP-R | www.aehsfoundation.org       |
| 1512 | Greener Cleanups Under the MCP  | DEP |     | DEP-R |                              |
|      |   |     | 4   |       | www.lspa.org                 |
| 1523 | Geothermal/GSHP Application Opportunities under the MCP- A  | DEP | 3 5 | DEP-R | www.lspa.org                 |
| 1504 | Component or Repurposing of Greener Cleanup Remedies  | DED |     | T     | 1                            |
| 1524 | The Vapor Intrusion Issue and What We Have Learned: an  | DEP | 4   | DEP-R | www.lspa.org                 |
|      | Updated Perspective on Investigating the Pathway, Sampling Techniques and Effective Mitigation Measures                         |     | 4   | T     |                              |
| 1538 | Quantitative Evaluation for Greener Cleanups Using SEFA   | DEP | 4   | DEP-R | www.aehsfoundation.org       |
| 1545 | An Introduction on Risk Communication for LSPs  | DEP | 2   | DEP-R | www.lspa.org                 |
| 1566 | Historic Fill   | DEP | 1.5 | DEP-R | www.lspa.org                 |
| 1575 | Ensuring Approval and Acceptance of Contaminated Soil   | DEP | 1   | DEP-R | www.lspa.org                 |
|      |   |     | 0.5 | T     |                              |
| 1579 | MCP Audit/Enforcement 2016-Case Studies   | DEP | 4   | DEP-R | www.lspa.org                 |
| 1580 | Vapor Intrusion Assessment and Mitigation in Massachusetts:   | DEP | 4   | DEP-R | www.aehsfoundation.org       |
|      | Status of Sites, Findings from the Field, and Guidance for Practitioners  |     |     |       |                              |
| 1591 | The Audit Process- 24 Years Later!  | DEP | 1   | DEP-R | www.lspa.org                 |
| 1601 | New VPH Method and Other MCP Current Issues   | DEP | 4   | DEP-R | www.lspa.org                 |
| 1605 | Meeting the Requirements of the National Pollutant Discharge  | DEP | 4   | DEP-R | www.lspa.org                 |
|      | Elimination System (NPDES) Remediation General Permit   |     |     |       |                              |
| 1608 | Per- and Polyfluoroalkyl Substances (PFAS): The Latest  | DEP | 2   | DEP-R | www.aehsfoundation.org       |
|      | Information   |     | 2   | T     |                              |
| 1610 | Enforcement Basics, As Applied To M.G.L. ch. 21E and the MCP  | DEP | 2   | DEP-R | www.lspa.org                 |
| 1610 | Dight from the Starte Complying with MCD Notification and   | DED | 4   | DEP-R | verver land one              |
| 1618 | Right from the Start: Complying with MCP Notification and Preliminary Response Action Requirements                              | DEP | 4   | DEF-K | www.lspa.org                 |
| 1619 | A Fresh Look at Brownfields Challenges and Opportunities  | DEP | 1   | DEP-R | www.lspa.org                 |
| 1019 | A Fresh Look at Brownheius Chanenges and Opportunities  | DEF | 1   | DEF-K | www.ispa.org                 |
| 1620 | Waste Management Considerations for MCP Projects  | DEP | 1   | DEP-R | www.lspa.org                 |
|      |   |     | 0.5 | T     |                              |
| 1625 | Case Studies of Site Remediation Using Greener Cleanup<br>Principles  | DEP | 1   | DEP-R | www.lspa.org                 |
| 1648 | Managing Construction in Contamination Areas  | DEP | 2   | DEP-R | www.lspa.org                 |
| 1653 | Proposed DEP Amendments   | DEP | 1.5 | DEP-R | www.lspa.org                 |
| 1654 | Telemetry on Active Exposure Pathway Mitigation Measures: A Look at Related Audit Findings and Challenges for LSPs and MassDEP. | DEP | 1   | DEP-R | www.lspa.org                 |

| 1631  | Briefing from the Statewide Leadership Team of the MassDEP<br>Bureau of Waste Site Cleanup   | DEP & EBC                                  | 2    | DEP-R | www.ebcne.org           |
|-------|--|--|------|-------|-------------------------|
| 1464  | Horizontal Remediation Wells   | Directional Tech.                          | 8    | T     | www.directionaltech.com |
| 1439  | Sub-slab Mitigation Systems for Vapor Intrusion  | Environmental<br>Business Council<br>(EBC) | 2    | T     | www.ebcne.org           |
| 1551  | EBC Site Remediation Program: MassDEP Interim Policy on Re-<br>Use of Soil for Large Reclamation Projects  | EBC  | 2.5  | T     | www.ebcne.org           |
| 1552  | EBC Site Remediation Program: Brownfields Massachusetts Update   | EBC  | 3    | Т     | www.ebcne.org           |
| 1568  | EBC Site Remediation & Redevelopment Program: Risk Communication   | EBC  | 2.25 | T     | www.ebcne.org           |
| 1598  | Contaminated Property Buying/Selling Strategies- A MOCK Transaction- Part Two: Development and Build-Out Planning  | EBC  | 3.5  | T     | www.ebcne.org           |
| 1622  | EBC Site Remediation and Redevelopment Program: Evaluation and Closure of NAPL Sites   | EBC  | 2    | T     | www.ebcne.org           |
| 1649  | EBC Site Remediation & Redevelopment Program: The 2018 MCP Amendments  | EBC  | 1.25 | T     | www.ebcne.org           |
| 1212  | Basic Principles of Groundwater Flow and Contaminant Migration   | EBI  | 4    | T     | www.ebiconsulting.com   |
| 1213  | Site Assessment and Remediation Concepts   | EBI  | 4    | T     | www.ebiconsulting.com   |
| 1292  | Management and Transportation of Multiple Waste Streams<br>Generated at Waste Cleanup Sites.   | EBI  | 4    | R     | www.ebiconsulting.com   |
| 1304  | Remedial Technologies for Contaminated Groundwater   | EBI  | 8    | T     | www.ebiconsulting.com   |
| 1314  | Groundwater Flow in Fractured Bedrock  | EBI  | 8    | T     | www.ebiconsulting.com   |
| 1336  | Aquifer Testing  | EBI  | 8    | T     | www.ebiconsulting.com   |
| 2014  | Recycling & Beneficial Uses of Petroleum-Contaminated Soils Processed with the Cold-Mix, Asphalt Emulsion Technology   | EBI  | 8    | T     | www.ebiconsulting.com   |
| 2014  | Beneficial Uses of Petroleum-Contaminated Soils Processed with the Cold-Mix, Asphalt Emulsion Technology   | EBI  | 8    | T     | www.ebiconsulting.com   |
| 1435  | Reading the Post-Glacial Landscape   | ECS  | 4    | T     | www.ecsconsult.com      |
| 1436  | Pioneer Valley's Post-Glacial Landscape  | ECS  | 8    | T     | www.ecsconsult.com      |
| 1446  | UST Assessment Monitoring and Regulatory Compliance  | ECS  | 2    | T     | www.ecsconsult.com      |
| 1543  | A Licensed Site Professional's Guide for Understanding and<br>Navigating Through the Regulatory and Technical Challenges of an<br>UST Release in Massachusetts | ECS  | 6.75 | Т     | www.ecsconsult.com      |
| 1543a | A Licensed Site Professional's Guide for Understanding and<br>Navigating Through the Regulatory and Technical Challenges of an<br>UST Release in Massachusetts | ECS  | 4    | Т     | www.ecsconsult.com      |
| 1557  | Legal Challenges Affecting the Role of the LSP and the LEP at Massachusetts and Connecticut UST Sites  | ECS/NISTM                                  | 2    | T     | www.ecsconsult.com      |
| 1554  | Remediation Workshop 2015  | EnviroWorkshops                            | 4    | T     | www.enviroworkshops.com |
| 1583  | Remediation Workshop 2016  | EnviroWorkshops                            | 4    | T     | www.enviroworkshops.com |
| 1604  | Remediation Workshop 2017  | EnviroWorkshops                            | 4    | T     | www.enviroworkshops.com |

| Board's<br>Course<br>No. | Course Name   | Presented By    | Credits<br>(Cr) | Category R= regulatory T= technical DEP= DEP course | Contact                |
|--------------------------|---|-----------------|-----------------|---|------------------------|
| 1632                     | Remediation Workshop 2018   | EnviroWorkshops | 4               | T   | www.envirworkshops.com |
| 1154A                    | Practical Methods in Applied Geochemistry: From Characterization to Remediation   | EPOC            | 8               | Т   | www.epoc.org           |
| 1214                     | Principles and Field Techniques for Characterizing Contaminant<br>Migration in Fractured Rock                           | EPOC            | 8               | Т   | www.epoc.org           |
| 1227                     | Aquifer Behavior and Testing  | EPOC            | 8               | T   | www.epoc.org           |
| 1235                     | Effective Site Characterization Through Conceptual Site Modeling  | EPOC            | 6               | T   | www.epoc.org           |
| 1260                     | Vapor Intrusion Seminar   | EPOC            | 8               | T   | www.epoc.org           |
| 1313                     | Practical Methods in Geochemical Tracers: From Characterization to Remediation  | EPOC            | 8               | Т   | www.epoc.org           |
| 1337                     | Aquifer Test Analysis in Fractured Rock with Emphasis on<br>Nonstandard Approaches and Interpretations                  | EPOC            | 8               | Т   | www.epoc.org           |
| 1350                     | Site Characterization Guidance Document   | EPOC            | 4               | T   | www.epoc.org           |
| 1364                     | Connecticut Geology-Understanding the Nature & Distribution of the State's Glacial Materials                            | EPOC            | 4               | Т   | www.epoc.org           |
| 1378                     | Combining Engineered Contaminant Source-area Treatment Technologies with Monitored Natural Attenuation for Site Cleanup | EPOC            | 8               | Т   | www.epoc.org           |
| 1256                     | A Short Course in Hydrogeological Applications of Environmental Geophysics Technologies                                 | EPOC            | 8               | Т   | www.epoc.org           |
| 1256a                    | A Short Course in Hydrogeological Applications of Environmental<br>Geophysics Technologies                              | EPOC            | 8               | Т   | www.epoc.org           |
| 1460                     | LNAPL Mass, Mobility and Recoverability Evaluation  | EPOC            | 4               | T   | www.epoc.org           |
| 1469                     | A Short Course in Contaminated Fractured Rock Hydrogeology and Geophysics   | EPOC            | 8               | Т   | www.epoc.org           |
| 1496                     | Direct Push Methods for Groundwater Sampling to Support High<br>Resolution Site Characterization                        | EPOC            | 8               | Т   | www.epoc.org           |
| 1518                     | Understanding ProUCL and Use of the 95% UCL to Demonstrate Compliance with RSR Criteria                                 | EPOC            | 6               | Т   | www.epoc.org           |
| 1519                     | Conceptual Site Modeling and the Data Quality Objectives Approach to Site Characterization                              | EPOC            | 8               | Т   | www.epoc.org           |
| 1527a                    | Contaminant Fate and Transport Processes  | EPOC            | 8               | Т   | www.epoc.org           |
| 1582                     | Sonic Drilling Overview and Field Demonstration   | EPOC            | 4               | T   | www.epoc.org           |
| 1587                     | In-Situ Thermal Remediation at the SRSNE Superfund Site   | EPOC            | 4               | T   | www.epoc.org           |
| 1593                     | Dissolved Oxygen Alteration Method for Fractured Bedrock<br>Wellbore Flow Characterization                              | EPOC            | 4               | Т   | www.epoc.org           |
| 1629                     | Low Flow Sampling and Hydraulic Conductivity Analysis   | EPOC            | 4               | T   | www.epoc.org           |
| 1656                     | ISCO/ISCR Permeable Reactive Barrier (PRBs) to Prevent  | EPOC            | 2               | T   | www.epoc.org           |

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|--------------------------|---|--|-----------------|---|--|
|                          | Migration of Contaminant Plumes   |  |                 |   |  |
| 1657                     | Remediation of Heavy Metals Using Insitu Approaches That<br>Combines Multiple Mechanisms                      | EPOC   | 2               | Т   | www.epoc.org                           |
| 1385                     | SESOIL and AT123D Modeling  | ESCI, LLC  | 8               | T   | <u>www.seview.com</u>                  |
| 1385a                    | SESOIL and AT123D Modeling  | ESCI, LLC  | 16              | T   | www.seview.com                         |
| 1385b                    | Introduction to SEVIEW 7.1- SESOIL and AT123D Modeling  | ESCI, LLC  | 4               | T   | www.seview.com                         |
| 1546                     | An AqSim Short Course   | Fitts Geosolutions                               | 14              | T   | www.fittsgeosolutions.com              |
| 1400                     | Reading Different New England Landscapes  | Fletcher   | 10              | T   | www.pfdigsoil.com                      |
| 1419                     | Soil Field Skills Workshop for LSPs   | Fletcher   | 8               | T   | pfdigsoil@gmail.com                    |
| 1621                     | Focused Remediation Seminars 2018   | Focused Remediation<br>Seminars                  | 5.5             | T   | www.focusedremediationseminars.c<br>om |
| 1526                     | MGP 2015 Conference   | GEI Consultants                                  | 50%             | Т   | www.mgpconference.com                  |
| 1609                     | MGP 2017 Conference   | GEI Consultants                                  | 50%             | T   | www.mgpsymposium.com                   |
| 1513                     | Workshop on Advanced Investigation and Contaminant<br>Remediation at Diffusion Limited Sites                  | GEO  | 7               | Т   | www.georemco.com                       |
| 1553                     | Introduction to Measuring and Interpreting Fluxes Between<br>Groundwater and Surface Water                    | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1570                     | Bedrock Characterization for Hydrogeologic Evaluation in Eastern<br>New England                               | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1576                     | Introduction to Arsenic in New England Soil and Groundwater   | GeoPractical                                     | 8               | T   | www.geopractical.com                   |
| 1584                     | Introduction to Ground Penetrating Radar in Environmental Investigation                                       | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1585                     | Glacial Geology of Northward Flowing Watersheds-Field Trip<br>through the Nashua and Concord River Watersheds | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1590                     | Introduction to Groundwater Modeling  | GeoPractical                                     | 4               | Т   | www.geopractical.com                   |
| 1590a                    | Introduction to Groundwater Modeling  | GeoPractical                                     | 6               | T   | www.geopractical.com                   |
| 1607                     | Introduction to New England Hydrogeology  | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1623                     | Geochemical Consequences of Landfill Impacts- From Data<br>Analysis to Conceptual Model                       | GeoPractical                                     | 8               | Т   | www.geopractical.com                   |
| 1407                     | Geologic Society of Connecticut Field Trip  | Geo. Society of CT                               | 4               | T   | Gail Batchelder                        |
| 1324                     | Assessment of LNAPL Mobility and Recoverability   | Groundwater &<br>Environmental<br>Services, Inc. | 8               | Т   |  |

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|--------------------------|--|--|-----------------|---|-------------------------|
| 1548                     | Distal Glaciodeltaic Controls On Groundwater Flow and<br>Contaminant Migration                                 | GZA<br>GeoEnvironmental,<br>Inc.       | 6               | T   |                         |
| 1562                     | The Vapor Intrusion Risk Pathway: A Practical Guide  | Hartman<br>Environmental<br>Geoscience | 14              | T   | www.hartmaneg.com       |
| 1563                     | In Situ Remediation Technologies Workshop  | ISOTEC                                 | 7               | T   | www.insituoxidation.com |
| 1564                     | Petroleum Vapor Intrusion: Fundamentals of Screening,<br>Investigation, and Management                         | ITRC                                   | 16              | Т   | www.itrcweb.org         |
| 1645                     | Vapor Mitigation Strategies  | JessCo                                 | 1               | T   |                         |
| 1125                     | Professionalism & Professional Ethics for LSPs & LEPs  | LSPA/EPOC                              | 8               | T   | www.lspa.org            |
| 1154                     | Practical Methods in Applied Contaminant Geochemistry: From Characterization to Remediation                    | LSPA                                   | 8               | Т   | www.lspa.org            |
| 1180                     | Quantitative Hydrogeology  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1181                     | Site Characterization and Remediation for DNAPLs   | LSPA                                   | 8               | T   | www.lspa.org            |
| 1199                     | Monitored Natural Attenuation  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1223-<br>2016a           | Measuring Biological Exposure to Environmental Chemicals   | LSPA                                   | 4               | Т   | www.lspa.org            |
| 1223-<br>2016b           | Assessment and Response to Perfluorinated Compounds in Groundwater and Soils in the Cape Cod Aquifer           | LSPA                                   | 1               | Т   | www.lspa.org            |
| 1228                     | Risk Assessment and Remediation at Sediment and Surface Water  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1232                     | Hydrogeology of Massachusetts  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1243                     | Enhanced Bioremediation  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1254                     | Evaluation of Data Quality for MCP Submittals  | LSPA/NEH                               | 4               | T   | www.lspa.org            |
| 1272                     | MCP Method 3 Risk Characterization for LSPs  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1275                     | In-Situ Chemical Oxidation   | LSPA                                   | 4               | T   | www.lspa.org            |
| 1278                     | MCP Method 2 Risk Characterization   | LSPA                                   | 4               | T   | www.lspa.org            |
| 1280                     | A Toolbox of Techniques to Generate Data for Environmental Risk<br>Characterizations                           | LSPA                                   | 8               | Т   | www.lspa.org            |
| 1281                     | Advanced Statistics  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1282                     | Evaluating Groundwater Flow and Chemical Transport Modeling: Guidelines for Hydrogeologists Who Don't "Model". | LSPA                                   | 8               | Т   | www.lspa.org            |
| 1284                     | Data Usability Assessment  | LSPA                                   | 4               | T   | www.lspa.org            |
| 1285                     | Demystifying the Activity and Use Limitation   | LSPA                                   | 4               | R   | www.lspa.org            |
| 1304                     | Remedial Technologies for Contaminated Groundwater   | LSPA                                   | 8               | T   | www.lspa.org            |
| 1314                     | Groundwater Flow in Fractured Bedrock  | LSPA                                   | 8               | T   | www.lspa.org            |
| 1315                     | Groundwater Quality and Geochemistry   | LSPA                                   | 8               | T   | www.lspa.org            |

| 1316 | Groundwater Concepts Review with Introduction to State of the    | LSPA    | 8 | T | www.lspa.org |
|------|--|---------|---|---|--------------|
| 1310 | Art Modeling Methods   | LSFA    | 0 | 1 | www.ispa.org |
| 1317 | Use of the CSM Process to Support MCP Deliverables               | LSPA    | 8 | T | www.lspa.org |
| 1324 | Assessment of LNAPL Mobility and Recoverability                  | LSPA    | 8 | T | www.lspa.org |
| 1329 | Integrating Expedited Site Assessment Into 310 CMR 40.0800       | LSPA    | 8 | T | www.lspa.org |
| 1330 | Environmental Law for LSP's                                      | LSPA    | 2 | R | www.lspa.org |
| 1332 | Slug Test Field Course   | LSPA    | 8 | T | www.lspa.org |
| 1335 | Overview of Vapor Intrusion and Mitigation Issues for LSPs       | LSPA    | 4 | T | www.lspa.org |
| 1340 | Vapor Intrusion and Mitigation Issues facing LSPs with Special   | LSPA    | 4 | T | www.lspa.org |
|      | Emphasis on Sampling and Analysis                                |         |   |   |              |
| 1352 | Introduction to Short Forms for Human Health Risk Assessment     | LSPA    | 4 | T | www.lspa.org |
| 1353 | Glacial Geology of Massachusetts for LSPs                        | LSPA    | 4 | T | www.lspa.org |
| 1369 | Aquifer Analysis   | LSPA    | 8 | T | www.lspa.org |
| 1371 | Vapor Intrusion for LSPs—Investigation, Sampling & Mitigation    | LSPA    | 8 | T | www.lspa.org |
| 1070 | Techniques   | Y 070 4 |   |   |              |
| 1372 | Improve Your Understanding of Ecological Risk Assessments to     | LSPA    | 4 | T | www.lspa.org |
| 10-0 | Write a Better RAO   |         |   |   |              |
| 1373 | Laboratory Interface Training Course                             | LSPA    | 4 | R | www.lspa.org |
| 1384 | MCP Risk Management  | LSPA    | 8 | T | www.lspa.org |
| 1386 | DNAPL Source Zones: Contaminant Distribution and Remediation     | LSPA    | 4 | T | www.lspa.org |
|      | Challenges   |         |   |   |              |
| 1392 | Fracturing & Injection Technologies                              | LSPA    | 8 | T | www.lspa.org |
| 1395 | Advanced Tools for In-Situ Remediation                           | LSPA    | 8 | T | www.lspa.org |
| 1402 | Case Studies of MassDEP Findings on Environmental Risk           | LSPA    | 8 | T | www.lspa.org |
|      | Characterizations  |         |   |   |              |
| 1404 | Pneumatic Slug Testing   | LSPA    | 8 | T | www.lspa.org |
| 1406 | MCP for Everyone   | LSPA    | 4 | R | www.lspa.org |
| 1409 | GIS Applications for Environmental Professionals                 | LSPA    | 8 | T | www.lspa.org |
| 1410 | Natural and Historic Fill Soils – Formation and Chemical Quality | LSPA    | 4 | T | www.lspa.org |
| 1411 | Application of MNA for Groundwater Remediation Using             | LSPA    | 8 | T | www.lspa.org |
|      | BIOCHLOR, BIOSCREEN, and Source DK Software Models               |         |   |   |              |
| 1420 | Fundamentals of Organic Chemistry                                | LSPA    | 8 | T | www.lspa.org |
| 1421 | Surveying for Environmental Professionals                        | LSPA    | 6 | T | www.lspa.org |
| 1424 | In-situ Chemical Oxidation                                       | LSPA    | 4 | T | www.lspa.org |
| 1425 | Surfactant Enhanced Fluid Recovery                               | LSPA    | 4 | T | www.lspa.org |
| 1437 | Potential False Positives in Volatile Petroleum Hydrocarbons     | LSPA    | 1 | T | www.lspa.org |
|      | (VHP) Analytical Methods: The Effect of non-Target Compounds     |         |   |   |              |
|      | on MCP Decision Making   |         |   |   |              |
| 1438 | Pioneer Monitoring and Remediation Optimization System           | LSPA    | 8 | T | www.lspa.org |
|      | Software (MAROS)   |         |   |   |              |
| 1443 | Applied Florescence Tracing Tools to Identify Preferential       | LSPA    | 8 | T | www.lspa.org |
|      | Groundwater Flow   |         |   |   |              |

| 1450  | Putting the Line of the Map: Issues Encountered in Defining the   | LSPA | 2   | T     | www.lspa.org |
|-------|---|------|-----|-------|--------------|
|       | Boundaries of an MCP Disposal Site  |      |     |       |              |
| 1451  | Expedite Site Assessment using Membrane Interface Probe (MIP) and Hydraulic Profiling Tool (HPT) Logging Technology | LSPA | 8   | T     | www.lspa.org |
| 1454  | 2D and 3D Environmental Data Visualization  | LSPA | 4   | T     | www.lspa.org |
| 1458  | Aqueous Organic and Metals Geochemistry   | LSPA | 8   | T     | www.lspa.org |
| 1459  | Characterization and Remediation of PCB-Contaminated Sites  | LSPA | 1   | T     | www.lspa.org |
| 1460  | LNAPL Mass, Mobility and Recoverability Evaluation  | LSPA | 4   | T     | www.lspa.org |
| 1461  | PCBs for Environmental Professionals  | LSPA | 4   | Т     | www.lspa.org |
|       |   |      | 4   | DEP-R |              |
| 1462  | Membrane Interface Probe Profiling System/Technology  | LSPA | 1   | T     | www.lspa.org |
| 1467  | Bioremediation. Principles, Techniques, and Applications  | LSPA | 4   | T     | www.lspa.org |
| 1468  | Preparing Conclusive MCP Phase Reports  | LSPA | 5   | T     | www.lspa.org |
| 1468a | Preparing Conclusive MCP Phase Reports  | LSPA | 6   | T     | www.lspa.org |
| 1469  | A Short Course in Contaminated Fractured Rock Hydrogeology and Geophysics   | LSPA | 8   | T     | www.lspa.org |
| 1476  | Air and Soil Gas Sample Collection and Analysis: How to Collect Relevant and Representative Data                    | LSPA | 4   | T     | www.lspa.org |
| 1480  | Study of Indoor Air Background Levels of VOCs and Air-Phase   | LSPA | 1   | T     | www.lspa.org |
| 1400  | Petroleum   | LSIA | 1   | 1     | www.ispa.org |
| 1485  | Applied Metals Geochemistry   | LSPA | 4   | T     | www.lspa.org |
| 1486  | LNAPL Assessment and Extraction Technologies  | LSPA | 1   | T     | www.lspa.org |
| 1487  | The Crisis of Soil Management for Development Projects in   | LSPA | 1   | T     | www.lspa.org |
|       | Massachusetts   |      |     |       |              |
| 1488  | Horizontal Remediation Wells: Transferring Effective  | LSPA | 1   | T     | www.lspa.org |
|       | Technologies from the Oil Industry to Environmental Remediation   |      |     |       |              |
| 1494  | Method 3 Risk Characterization: A Short Course for LSPs   | LSPA | 6   | T     | www.lspa.org |
| 1496  | Direct Push Methods for Groundwater Sampling to Support High  | LSPA | 8   | T     | www.lspa.org |
|       | Resolution Site Characterization  |      |     |       |              |
| 1497  | Vapor Intrusion Site Management   | LSPA | 1   | T     | www.lspa.org |
| 1502  | Who's Paying for This Cleanup   | LSPA | 1   | R     | www.lspa.org |
| 1504  | Introduction to Environmental Forensics of Organic Chemicals  | LSPA | 8   | T     | www.lspa.org |
| 1507  | Effective Data Visualization for Environmental Professionals  | LSPA | 8   | T     | www.lspa.org |
| 1508a | DNAPL Site Remediation: A Short Course for LSPs   | LSPA | 4   | T     | www.lspa.org |
| 1511  | Remote Telemetry in SSDS Installations  | LSPA | 1   | T     | www.lspa.org |
| 1514  | LNAPL and VI Sites: Using AULs for Site Closure Under the New   | LSPA | 1   | R     | www.lspa.org |
|       | MCP   |      |     |       |              |
| 1515a | The New MCP for Everyone: A Practical Understanding of the  | LSPA | 4.5 | R     | www.lspa.org |
|       | Massachusetts Contingency Plan  |      |     |       |              |
| 1516  | LSPs and Lawyers:Working Together on MCP Projects   | LSPA | 1   | T     | www.lspa.org |
| 1517  | Six Months Later: What the 2014 MCP Amendments Mean for   | LSPA | 1   | R     | www.lspa.org |
|       | Remediation, Closure, and Development   |      |     |       |              |
| 1522  | Practical Applications of Petroleum Hydrocarbon Chemistry   | LSPA | 8   | T     | www.lspa.org |

| 1529  | Evaluating Wetlands Doesn't Have to be Risky Business   | LSPA | 1   | Т | www.lspa.org |
|-------|---|------|-----|---|--------------|
| 1531  | Use of Surface Geophysical Tools for Subsurface Assessment:   | LSPA | 1   | T | www.lspa.org |
|       | From Theory to Hydrogeologic Cases  |      |     |   |              |
| 1533  | Ground Water to Surface Water Transitions- A Short Course for LSPs  | LSPA | 6   | T | www.lspa.org |
| 1534  | Surveying for Environmental Professionals   | LSPA | 6   | T | www.lspa.org |
| 1536  | Emerging Contaminants   | LSPA | 4   | T | www.lspa.org |
| 1539  | 2015 Soil Management Options: Will The Crisis Be Averted?   | LSPA | 1   | T | www.lspa.org |
| 1540  | New Data for Background Indoor Air Levels of VOCs and APH in Office Buildings and Schools   | LSPA | 1   | T | www.lspa.org |
| 1544  | Estimating LNAPL Transmissivity: A Guide to Using ASTM Standard Guide E2856   | LSPA | 16  | T | www.lspa.org |
| 1549  | Ethical Dilemmas: Black Lines or Shades of Gray?  | LSPA | 1   | T | www.lspa.org |
| 1555  | GW-1 Challenges   | LSPA | 1   | T | www.lspa.org |
| 1558  | Method 3Ecological Risk Assessment  | LSPA | 4   | T | www.lspa.org |
| 1560a | Rapid Design and Analysis of Groundwater Remediation Systems  | LSPA | 8   | T | www.lspa.org |
| 1561  | Case Closed! Navigating the MassDEP LNAPL Guidance Document   | LSPA | 1   | T | www.lspa.org |
| 1569  | In-Situ Use of Activated Carbon   | LSPA | 1   | T | www.lspa.org |
| 1573  | X-Ray Fluorescence Analysis: A Short Course for LSPs and Other<br>Environmental Professionals   | LSPA | 6   | T | www.lspa.org |
| 1592  | How to Achieve More Representative Soil Data  | LSPA | 1   | T | www.lspa.org |
| 1594  | In-Situ Remediation Using Activated Carbon-Based Injectates:<br>Theory and Application  | LSPA | 4   | T | www.lspa.org |
| 1596  | Perspectives on Understanding, Assessing, Analyzing, and<br>Remediating Perfluorinated Compounds: A Regulator, An<br>Engineer, A Geologist, and A Lab | LSPA | 1.5 | Т | www.lspa.org |
| 1597  | New Equipment and Technologies for Your MCP Sites   | LSPA | 1   | Т | www.lspa.org |
| 1602  | Remediation of Mixed Organics and Perfluoralkyl Compounds (PFAS) with OxyZone®, a Multi-Oxidant Blend   | LSPA | 1   | T | www.lspa.org |
| 1603  | Sediment, Surface Water, and Biota Sampling Methods to Support MCP Assessments  | LSPA | 8   | T | www.lspa.org |
| 1611  | Increasing Remediation Success: Focus on Planning, Implementation, and Combining Technologies   | LSPA | 8   | Т | www.lspa.org |
| 1616  | Soil Saturation Based LNAPL Assessment: A Case Study With an Introduction to 3D PDF File and LiDAR  | LSPA | 1   | Т | www.lspa.org |
| 1617  | Commingled Plumes, Downgradient Property Status and Privatized Cleanup Programs: Lessons Learned from Two Decades of Practice                         | LSPA | 1   | T | www.lspa.org |
| 1626  | Environmental Law for LSPs  | LSPA | 4   | R | www.lspa.org |
| 1627  | MCP Remediation Waste Management  | LSPA | 8   | R | www.lspa.org |
| 1630  | Oil and Sediment Toxicity: Characterizing an Oil Site   | LSPA | 1   | Т | www.lspa.org |
| 1639  | Treatability Testing for Remedial Design  | LSPA | 1   | T | www.lspa.org |

| 1642    | The Basics of Monitored Natural Attenuation  | LSPA                                | 4   | T     | www.lspa.org           |
|---------|--|-------------------------------------|-----|-------|------------------------|
| 1643    | Per- and Polyfluoroalkyl Substances (PFAS) Remediation   | LSPA                                | 4   | T     | www.lspa.org           |
| 1646    | Simplified Approach for Petroleum LNAPL Sites  | LSPA                                | 1   | T     | www.lspa.org           |
| 1647    | Facility Roundtable: Managing Remediation and Hazardous Waste  | LSPA                                | 4   | T     | www.lspa.org           |
| 1652    | Hands On 2D and 3D Environmental Data Visualization  | LSPA                                | 4   | T     | www.lspa.org           |
| 1655    | How Building Science and Performance Impact Vapor Intrusion  | LSPA                                | 1   | T     | www.lspa.org           |
| 1414    | LSP Board Disciplinary Case Workshop   | LSP Board                           | 3   | DEP-R |                        |
| 1556    | Update on the Board of Registration of Hazardous Waste Site Cleanup Professionals  | LSP Board/LSPA                      | 1.5 | DEP-R | www.lspa.org           |
| 1615    | Chemistry Matters: Management, Handling, and State of the Science  | MCTA                                | 2   | T     | www.masscta.org        |
| 1634    | Polyfluoroalkyl Substances (PFAS): Regulation, Research, Risk,<br>Mitigation & Alternatives  | MCTA                                | 4   | T     | www.masscta.org        |
| 1541    | Massachusetts Geological Society First Annual Field Trip   | Massachusetts<br>Geological Society | 6   | T     | www.massgeosociety.org |
| 1572    | Massachusetts Geological Society Second Annual Field Trip  | Massachusetts<br>Geological Society | 5   | T     | www.massgeosociety.org |
| 1560    | Rapid Design and Analysis of Groundwater Remediation Systems   | McLane<br>Environmental             | 7   | T     | www.mclaneenv.com      |
| 1465    | Integrating Molecular Biological Tools into Site Management  | Microbialinsights                   | 4   | T     | http://www.microbe.com |
| 1204a   | Improving Hydrogeologic Analysis of Fractured Bedrock Systems  | Midwest<br>GeoSciences Group        | 24  | T     | www.midwestgeo.com     |
| 1205    | Characterizing Groundwater Movement Through Glacial Sequences  | Midwest<br>GeoSciences Group        | 16  | T     | www.midwestgeo.com     |
| 1231    | Advances in Pumping and Slug Testing for Improved Site<br>Characterization: New Concepts, Field Methods and Data Analysis<br>Techniques      | Midwest<br>GeoSciences Group        | 16  | T     | www.midwestgeo.com     |
| 1231b   | Advanced Aquifer Testing Featuring AQTESOLV: New Concepts, Field Methods, and Data Analysis Techniques                                       | Midwest<br>GeoSciences Group        | 24  | T     | www.midwestgeo.com     |
| 1417A-T | Various Technical Webinars   | Midwest<br>GeoSciences Group        | 1.5 | T     | www.midwestgeo.com     |
| 1426    | DNAPLs Through Fractured Rock Aquifers   | Midwest<br>GeoSciences Group        | 8   | T     | www.midwestgeo.com     |
| 1606    | Managing the Complexities and Uncertainties of Soil Sequences:<br>For Hydrogeological and Geotechnical Investigations- Part 1,<br>Principles | Midwest<br>GeoSciences Group        | 16  | T     | www.midwestgeo.com     |
| 1624    | Modern Management of Risks at LNAPL Sites  | Midwest<br>GeoSciences Group        | 16  | T     | www.midwestgeo.com     |
| 1025A   | Visual Modlfow   | NGWA                                | 24  | T     | www.ngwa.org           |
| 1026A   | Analysis and Design of Aquifer Tests   | NGWA                                | 27  | T     | www.ngwa.org           |
| 1027    | Probability, Statistics and Geostatistics for Environmental Professionals  | NGWA                                | 20  | T     | www.ngwa.org           |
| 1063    | Soil and Groundwater Modeling for Soil Cleanup Level   | NGWA                                | 12  | T     | www.ngwa.org           |

| Board's<br>Course<br>No. | Course Name  | Presented By | Credits<br>(Cr) | Category R= regulatory T= technical DEP= DEP course | Contact      |
|--------------------------|--|--------------|-----------------|---|--------------|
|                          | Evaluation   |              |                 |   |              |
| 1065                     | Use of MODFLOW (USGS Modular Flow Model) for Simulation of Groundwater Flow and Advective Transport  | NGWA         | 36              | Т   | www.ngwa.org |
| 1066A                    | Principles of Groundwater—Flow, Transport, and Remediation   | NGWA         | 21              | T   | www.ngwa.org |
| 1120                     | Transport & Fate Principles & Parameters Estimation  | NGWA         | 15              | T   | www.ngwa.org |
| 1121                     | Principles & Practice of Forced Air Remediation  | NGWA         | 22              | T   | www.ngwa.org |
| 1122                     | Computer Modeling of Natural Attenuation & Bioremediation<br>Systems   | NGWA         | 28              | T   | www.ngwa.org |
| 1148                     | Principles & Practice of Forced Air Remediation  | NGWA         | 24              | T   | www.ngwa.org |
| 1162                     | Geostatistics & the Data Quality Objectives Process for Environmental Remediation Decision-Making  | NGWA         | 19              | Т   | www.ngwa.org |
| 1183                     | Environmental Geochemistry of Metals – Investigation & Remediation   | NGWA         | 22              | Т   | www.ngwa.org |
| 1184                     | Fracture Trace & Lineament Analysis: Application to Ground Water Resources Characterization & Protection   | NGWA         | 28              | Т   | www.ngwa.org |
| 1185                     | Natural Attenuation for Remediation of Contaminated Sites  | NGWA         | 22              | T   | www.ngwa.org |
| 1186                     | Low-Cost Remediation Strategies for Contaminated Soil & GW   | NGWA         | 16              | T   | www.ngwa.org |
| 1195                     | Aquifer tests: Operation and Parameter Estimation  | NGWA         | 16              | T   | www.ngwa.org |
| 1197                     | GIS and Data Management for Ground Water Modeling  | NGWA         | 24              | T   | www.ngwa.org |
| 1198                     | Natural Attenuation, Risk Assessment, and Risk Based Corrective<br>Action: Analysis and Decision making Through Applied ground<br>Water Modeling | NGWA         | 44              | Т   | www.ngwa.org |
| 1236                     | An Introduction to Ground Water  | NGWA         | 24              | T   | www.ngwa.org |
| 1237                     | Estimating Times of Remediation Associated with Monitored<br>Natural Attenuation and Contaminant Source Removal                                  | NGWA         | 16              | T   | www.ngwa.org |
| 1238                     | Model Calibration Using PEST   | NGWA         | 8               | T   | www.ngwa.org |
| 1239                     | Low-Cost Remediation Strategies for Contaminated Soil and<br>Ground Water  | NGWA         | 16              | Т   | www.ngwa.org |
| 1270                     | The New MODFLOW Course   | NGWA         | 32              | T   | www.ngwa.org |
| 1270a                    | The New MODFLOW Course: Theory and Hands-On Applications   | NGWA         | 31/33           | T   | www.ngwa.org |
| 1338                     | Isotopic and Hydrogeological Characterization of Fractured Rock<br>Settings: Current and Novel Approaches  | NGWA         | 16              | Т   | www.ngwa.org |
| 1396                     | Monitored Natural Attenuation: Mechanisms, Site<br>Characterization, Evaluation, and Monitoring  | NGWA         | 16              | T   | www.ngwa.org |
| 1397                     | Advanced Techniques for Evaluation and Quantifying Natural Attenuation   | NGWA         | 16              | Т   | www.ngwa.org |
| 1399                     | Design and Construction of Wells   | NGWA         | 16              | T   | www.ngwa.org |
| 1430                     | Focus Conference on Fractured Rock and Eastern Groundwater   | NGWA         | 50%             | T   | www.ngwa.org |

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|--------------------------|--|--------------|-----------------|---|----------------|
| 1456                     | Introduction to Groundwater Geochemistry Reaction Monitoring (#239)  | NGWA         | 16              | Т   | www.ngwa.org   |
| 1478                     | Conference on Groundwater in Fractured Rock and Sediments  | NGWA         | 50%             | T   | www.ngwa.org   |
| 1481                     | MODFLOW-Contaminant Fate and Transport Groundwater Modeling  | NGWA         | 6               | Т   | www.ngwa.org   |
| 1482                     | Bay State Groundwater Forum (max 3.5 credits)  | NGWA         | 50%             | T   | www.ngwa.org   |
| 1484                     | Pillars of Groundwater Innovation Conference   | NGWA         | 50%             | T   | www.ngwa.org   |
| 1503                     | Combined Remedies: The Time Has Come   | NGWA         | 5.25            | T   | www.ngwa.org   |
| 1542                     | 2015 NGWA Conference on Groundwater in Fractured Rock  | NGWA         | 50%             | T   | www.ngwa.org   |
| 1612                     | NGWA Conference on Fractured Rock and Groundwater (5017)   | NGWA         | 50%             | Т   | www.ngwa.org   |
| 1633                     | Groundwater/Surface Water Interactions: Field and Mathematical Approaches to Evaluating Groundwater Seepage (#242) | NGWA         | 14              | Т   | www.ngwa.org   |
| 1365                     | Vapor Intrusion in Commercial and Industrial Buildings   | NEWMOA       | 6               | T   | www.newmoa.org |
| 1370                     | Getting More Bang for Your Buck: Real-time Data Collection & Interpretation for Better Decision-making             | NEWMOA       | 6               | Т   | www.newmoa.org |
| 1370a                    | Making Better Decisions: Real-Time Data Collection and Interpretation  | NEWMOA       | 5.5             | Т   | www.newmoa.org |
| 1381                     | Greener Cleanups: What Does It Mean & How Do You Do It?  | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1391                     | Contaminated Sediment Sites: Characterization and Decision-<br>Making  | NEWMOA       | 5               | T   | www.newmoa.org |
| 1401                     | Vapor Intrusion Pathway: A Practical Guideline   | NEWMOA       | 14              | T   | www.newmoa.org |
| 1405                     | Remediation of Contaminated Sediment Sites   | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1412                     | Enhanced In-Situ Bioremediation  | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1431                     | Ecological Risk Assessment   | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1440                     | LNAPL: Science, Management, and Technology   | NEWMOA       | 16              | T   | www.newmoa.org |
| 1453                     | In-Situ Thermal Remediation  | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1457                     | Understanding TSCA and State Requirements for Sites with PCBs  | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1479                     | Vapor Intrusion Updates  | NEWMOA       | 5               | T   | www.newmoa.org |
| 1483                     | Moving Toward More Sustainable Remediation   | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1491                     | Communicating Risk to the Public   | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1508                     | DNAPL Investigation & Remediation: The Evolving State-of – Practice  | NEWMOA       | 5.5             | T   | www.newmoa.org |
| 1532                     | TCE Vapor Intrusion: State of the Science, Regulation, and Technical Practice Workshop                             | NEWMOA       | 5.5             | Т   | www.newmoa.org |
| 1547                     | 1,4-Dioxane Assessment and Remediation Workshop  | NEWMOA       | 5.5             | Т   | www.newmoa.org |
| 1581                     | Monitored Natural Attenuation: Appropriate Tool or Easy Way  | NEWMOA       | 5.5             | T   | www.newmoa.org |

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|--------------------------|---|------------------------------|-----------------|---|---------------------------|
|                          | Out?  |                              |                 |   |                           |
| 1599                     | PFAS in The Northeast: State of Practice and Regulatory<br>Perspectives   | NEWMOA                       | 6               | Т   | www.newmoa.org            |
| 1614                     | Combining Technologies to Improve Remediation Outcomes  | NEWMOA                       | 5.5             | Т   | www.newmoa.org            |
| 1628                     | Back-to-Basics Part 1: Developing the CSM & Site<br>Characterization Plan   | NEWMOA                       | 5.5             | Т   | www.newmoa.org            |
| 1640                     | Data Collection & Interpretation: State of Practice & Lessons<br>Learned  | NEWMOA                       | 6               | Т   | www.newmoa.org            |
| 1034                     | Environmental Sampling Field Course   | Nielsen Env. Field<br>School | 32              | Т   | www.envirofieldschool.com |
| 1034a                    | The Environmental Sampling E-Course   | Nielsen Env. Field<br>School | 32              | Т   | www.envirofieldschool.com |
| 1035                     | The Complete Ground-Water Monitoring Field Course   | Nielsen Env. Field<br>School | 38              | Т   | www.envirofieldschool.com |
| 1035a                    | The Complete Ground-Water Monitoring E-Course   | Nielsen Env. Field<br>School | 38              | Т   | www.envirofieldschool.com |
| 1036                     | Assessment and Remediation of Petroleum Hydrocarbon Releases: Fundamentals and Field Practices                            | Nielsen Env. Field<br>School | 24              | Т   | www.envirofieldschool.com |
| 1037                     | Field Practices and Analytical Methods for Formation Hydraulic Testing: Pumping Tests and Slug Tests                      | Nielsen Env. Field<br>School | 24              | Т   | www.envirofieldschool.com |
| 1038                     | Monitoring Well Design, Construction & Development  | Nielsen Env. Field<br>School | 16              | Т   | www.envirofieldschool.com |
| 1038a                    | The Ground-Water Monitoring Well Design, Construction & Development E-Course  | Nielsen Env. Field<br>School | 16              | Т   | www.envirofieldschool.com |
| 1039                     | The Ground-Water Sampling Field Course  | Nielsen Env. Field<br>School | 25              | Т   | www.envirofieldschool.com |
| 1039a                    | The Complete Ground-Water Sampling E-Course   | Nielsen Env. Field<br>School | 25              | Т   | www.envirofieldschool.com |
| 1082                     | Assessment of Petroleum Hydrocarbon Releases for Risk Based<br>Corrective Action, Natural Attenuation and Remedial Design | Nielsen Env. Field<br>School | 16              | Т   | www.envirofieldschool.com |
| 1083                     | Advanced Environmental Site Characterization Field Methods (formerly Accelerated Site Characterization)                   | Nielsen Env. Field<br>School | 16              | Т   | www.envirofieldschool.com |
| 1084                     | Micropurge Low-Flow Purging and Groundwater Sampling  | Nielsen Env. Field<br>School | 8               | Т   | www.envirofieldschool.com |
| 1110                     | Practical Tech's for Cost-Effective Ground-Water Sampling   | Nielsen Env. Field<br>School | 8               | Т   | www.envirofieldschool.com |
| 1094                     | Practical Cost-Effective Techniques for Site Characterization,<br>Ground-Water Monitoring and Sampling                    | Nielsen Env. Field<br>School | 36              | Т   | www.envirofieldschool.com |

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|--------------------------|--|---|-----------------|---|--------------------------------|
| 1201                     | Soil Sampling for Volatile Organic Compounds   | Nielsen Env. Field<br>School                          | 8               | Т   | www.envirofieldschool.com      |
| 1201a                    | The Soil Sampling for Volatile Organic Compounds E-Course                                    | Nielsen Env. Field<br>School                          | 8               | T   | www.envirofieldschool.com      |
| 1202                     | Fundamentals of Ground Water and Contaminant Movement  | Nielsen Env. Field<br>School                          | 8               | Т   | www.envirofieldschool.com      |
| 1320                     | The No-Purge Sampling Field Course   | Nielsen Env. Field<br>School                          | 8               | T   | www.envirofieldschool.com      |
| 1328                     | The Complete Surface Water & Sediment Sampling Field Course                                  | Nielsen Env. Field<br>School                          | 16              | Т   | www.envirofieldschool.com      |
| 1347                     | 2008 & 2010 North American Environmental Field Conference & Exposition                       | Nielsen Env. Field<br>School                          | 50%             | Т   | www.envirofieldschool.com      |
| 1571                     | The Complete Soil Sampling E-Course  | Nielsen Env. Field<br>School                          | 18              | Т   | www.envirofieldschool.com      |
| 1574                     | The Low-Flow Purging and Sampling and No-Purge Sampling E-Course                             | Nielsen Env. Field<br>School                          | 15              | Т   | www.envirofieldschool.com      |
| 2016                     | RS 3110-Digital Image Processing; GIS 3120-Remote Sensing; GIS 3180-GPS and GIS              | Northeastern<br>University                            | 39              | T   | Northeastern University        |
| 1565                     | Principles of Quality Assurance and Quality Control in Environmental Field Programs          | NWETC   | 13              | T   | www.nwetc.org                  |
| 1577                     | Fundamental Contaminant Chemistry in Soil and Groundwater                                    | NWETC   | 13              | T   | www.nwetc.org                  |
| 1578                     | Emerging Contaminants Workshop   | NWETC   | 6.5             | T   | www.nwetc.org                  |
| 1250                     | Fundamentals of Geology and Applied Geology  | Pennsylvania Council<br>of Professional<br>Geologists | 16              | Т   | (717) 730-9745<br>www.pcpg.org |
| 1506                     | Introduction to Inorganic and Organic Groundwater Geochemistry                               | Pennsylvania Council<br>of Professional<br>Geologists | 16              | Т   | (717) 730-9745<br>pcpg.org     |
| 1567                     | Design and Application of In Situ Remediation Technologies                                   | PeroxyChem, LLC                                       | 5               | T   | www.peroxychem.com             |
| 1150                     | Groundwater Pollution and Hydrology  | Princeton<br>Groundwater                              | 38              | Т   | www.princeton-groundwater.com  |
| 1151                     | The Princeton Remediation Course (note: evening session are mandatory to receive 41 credits) | Princeton<br>Groundwater                              | 41              | T   | www.princeton-groundwater.com/ |
| 1286                     | Evaluation of Indoor Inhalation Pathway  | RAM Group of<br>Gannett Fleming                       | 8               | Т   | www.gannettfleming.com         |
| 1500                     | Evaluation of Indoor Inhalation Pathway  | RAM Group of<br>Gannett Fleming                       | 16              | Т   | www.gannettfleming.com         |
| 1500a                    | Understanding Indoor Vapor Intrusion Pathway   | RAM Group of<br>Gannett Fleming                       | 8               | Т   | www.gannettfleming.com         |

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|--------------------------|--|---------------------------------|-----------------|---|--|
| 1501                     | Application of Risk Assessment as a Decision Making Tool for Contaminated Sites              | RAM Group of<br>Gannett Fleming | 16              | Т   | www.gannettfleming.com                     |
| 1501a                    | Application of Risk Assessment as a Decision Making Tool for Contaminated Sites              | RAM Group of<br>Gannett Fleming | 12              | Т   | www.gannettfleming.com                     |
| 1527                     | Contaminant Fate and Transport Processes and Modeling  | RAM Group of<br>Gannett Fleming | 12              | T   | www.gannettfleming.com                     |
| 1404a                    | Pneumatic Slug Testing   | Ram's Horn                      | 4               | T   | www.vgwacademy.com                         |
| 1441                     | Determining Hydraulic Conductivity While Low Flow Sampling                                   | Ram's Horn                      | 4               | T   | www.vgwacademy.com                         |
| 1463                     | Virtual Ground Water Academy: Slug Testing Course  | Ram's Horn                      | 4               | T   | www.vgwacademy.com                         |
| 1613                     | RE3 Conference 2017  | RE3                             | 50%             | T   | www.re3conference.com                      |
| 1292                     | Management and Transportation of Multiple Waste Streams<br>Generated at Waste Cleanup Sites. | Rec Tec                         | 4               | R   | George Camougis (508) 248-4040             |
| 1528                     | Technology Workshop  | Redox Tech                      | 2               | T   | www.redox-tech.com                         |
| 1595                     | Redox Tech and Carus Chemical Workshop   | Redox Tech                      | 2               | T   | www.redox-tech.com                         |
| 1638                     | Optimization and Monitoring for Bioremediation of Chlorinated Compounds                      | Remediation<br>Seminars         | 4               | Т   | www.remediationseminar.com                 |
| 1428                     | RemTEC Summit  | RemTEC                          | 50%             | T   |  |
| 1420                     | Fundamentals of Organic Chemistry  | RISEP                           | 8               | T   |  |
| 1073                     | MCP Training Program   | Robert Palermo                  | 40              | R   | Robert Palermo (781) 942-0689              |
| 1073A                    | MCP Training Program   | Robert Palermo                  | 40              | R   | Robert Palermo (781) 942-0689              |
| 1452                     | Sustainable Property Transactions  | RTM<br>Communications,<br>Inc.  | 3.5             | T   | Tacy Cook Telego<br>tacytelego@rtmcomm.com |
| 1310                     | Groundwater in Fractured Bedrock   | Rutgers                         | 6               | T   | www.cpe.rutgers.edu                        |
| 1379                     | Practical Applications in Hydrogeology   | Rutgers                         | 28              | T   | www.cpe.rutgers.edu                        |
| 1415                     | Environmental Forensics  | Rutgers                         | 7.5             | T   | www.cpe.rutgers.edu                        |
| 1415a                    | Environmental Forensics  | Rutgers                         | 14              | T   | www.cpe.rutgers.edu                        |
| 1442                     | Innovative Technologies for Site Remediation   | Rutgers                         | 6               | T   | www.cpe.rutgers.edu                        |
| 1586                     | PAH Forensics Geochemistry   | Rutgers                         | 8               | T   | www.cpe.rutgers.edu                        |
| 1636                     | Forensic Geochemical Age Dating and Environmental Litigation                                 | Rutgers                         | 5               | T   | www.cpe.rutgers.edu                        |
| 1637                     | Forensic Geochemical and Geophysical Statistical Data<br>Visualization                       | Rutgers                         | 6               | Т   | www.cpe.rutgers.edu                        |
| 1267                     | Designing and Implementing Field Studies of Amphibians and<br>Reptiles on Contaminated Sites | SETAC                           | 8               | Т   | Nick Anastas (617) 556-1157                |
| 1382                     | Causal Analysis/Stressor Identification  | SETAC                           | 8               | T   | www.nacsetac.org                           |
| 1403                     | Introduction to Green Chemistry  | SETAC                           | 4               | T   | www.nacsetac.org                           |
| 1413                     | Introduction to Statistics for Environmental Professionals                                   | SETAC                           | 6               | T   | www.nacsetac.org                           |
| 1427                     | University Consortium for Field-Focused Groundwater  | SETAC                           | 50%             | T   | University of Guelph                       |

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|--------------------------|--|-----------------------------------|-----------------|---|--|
| 1445                     | Contamination Research Program for Annual Progress Meeting An Introduction to Emerging Technologies for Environmental Data | SETAC                             | 8               | T   |  |
| 1466                     | Monitoring: Loggers to Sensors Networks to the Cloud  ArcGIS Online: Interactive Web Mapping and Problem Solving           | SETAC                             | 6               | T   | www.nacsetac.org   |
| 1535                     | for Environmental Professionals  Communicating Chemical and Environmental Risk   | SETAC                             | 6               | T   | www.setac.org  |
| 1658                     | The Use of Equilibrium Passive Sampling for Environmental Investigations   | SETAC                             | 4               | T   | www.setac.org  |
| 1203                     | Field Screening Petroleum Hydrocarbons Using Ultraviolet Fluorescence Technology   | Sitelab Corp.                     | 4               | Т   | Steve Greason (603) 643-7800<br>sgreason@site-lab.com      |
| 1050                     | CEE 173 – Health Effects and Risk Assessment   | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1051                     | CEE 113 – Groundwater Hydrology  | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1052                     | CEE 167 – Environmental Toxicology   | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1053                     | CEE 139 – Bioremediation: Natural and Enhanced   | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais (617) 627-3763                     |
| 1067                     | CEE 143 – Site Remediation   | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais (617) 627-3763                     |
| 1068                     | CEE 168 – Exposure Assessment  | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1100                     | Extracting Information from Environmental Data   | Tufts Univ                        | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1069                     | CEE 172 – Fate and Transport of Environmental Contaminants   | Tufts Univ, Spring<br>Term, Audit | 70% P<br>50% A  | Т   | Anne Marie C. Desmarais<br>(617) 627-3763                  |
| 1242                     | CEE 138 Hazardous Waste Treatment Technologies – Full Semester Course  | Tufts University                  | 8               | Т   | Larry Cohen (617) 627-3211                                 |
| 1355                     | National Conference & Training Triad Investigations—New Approaches & Innovative Strategies & Associated Workshops          | U Mass Amherst                    | Various         | Т   | Denise Leonard (413) 545-1239                              |
| 1380                     | International Conference on the Environmental Implications and Applications of Nanotechnology                              | U Mass Amherst                    | 50%             | Т   | teiconferences.com/nanoconference                          |
| 1074                     | 14.562 – Physical and Chemical Hydrogeology  | U Mass Lowell                     | 70% P<br>50% A  | Т   | Clifford Bruell (978) 934-2284<br>www.eng.uml.edu/Dept/civ |
| 1075                     | 14.563 – Design and Analysis of Waste Containment Systems  | U Mass Lowell                     | 70% P<br>50% A  | Т   | Clifford Bruell (978) 934-2284<br>www.eng.uml.edu/Dept/civ |
| 1076                     | 14.567 – Environmental Chemistry I   | U Mass Lowell                     | 70% P<br>50% A  | Т   | Clifford Bruell (978) 934-2284<br>www.eng.uml.edu/Dept/civ |
| 1077                     | 14.568 – Environmental Chemistry II  | U Mass Lowell                     | 70% P           | T   | Clifford Bruell (978) 934-2284                             |

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|--------------------------|---|---------------------------|-----------------|---|--|
|                          |   |                           | 50% A           |   | www.eng.uml.edu/Dept/civ                                   |
| 1078                     | 14.594 – Fundamentals of Contaminated Site Treatment  | U Mass Lowell             | 70% P           | T   | Clifford Bruell (978) 934-2284                             |
|                          | Techniques  |                           | 50% A           |   | www.eng.uml.edu/Dept/civ                                   |
| 1079                     | 18.581 – Understanding the MCP  | U Mass Lowell             | 70% P           | R   | Clifford Bruell (978) 934-2284                             |
| 10704                    | 15 222 Y 1  | XXX X 11                  | 50% A           |   | www.eng.uml.edu/Dept/civ                                   |
| 1079A                    | 15.332 – Understanding the MCP (by Univ. College Cont. Ed) Same as above (if you have taken the above course and are submitting it for credit toward license renewal you cannot also use credit from this course for license renewal) | U Mass Lowell             | 70% P<br>50% A  | R   | Clifford Bruell (978) 934-2284<br>www.eng.uml.edu/Dept/civ |
| 1088                     | 14.575 – Groundwater Modeling   | U Mass Lowell             | 70% P           | T   | Clifford Bruell (978) 934-2284                             |
|                          |   |                           | 50% A           |   | www.eng.uml.edu/Dept/civ                                   |
| 1093                     | Assessing & Remediating Petroleum Contaminated Sites  | U Mass Lowell             | 70% P           | T   | Enrollment Svcs (978) 934-2700                             |
|                          |   |                           | 50% A           |   | (http://www.uml.edu/DCE)                                   |
| 1099                     | 14.594 – Fundamentals of Contaminated Site Treatment techniques   | U Mass Lowell             | 70% P           | T   | Clifford Bruell (978) 934-2284                             |
|                          |   |                           | 50% A           |   | www.eng.uml.edu/Dept/civ                                   |
| 1226                     | 19.683 – Risk Assessment  | U Mass Lowell             | 70% P           | T   | Enrollment Svcs (978) 934-2700                             |
|                          |   |                           | 50% A           |   | (http://www.uml.edu/DCE)                                   |
| 2000                     | 14.595 – Hazardous Waste Site Remediation   | U Mass Lowell             | 70% P<br>50% A  | T   | Enrollment Svcs (978) 934-2700 (http://www.uml.edu/DCE)    |
| 2013                     | 18.503 – Environmental Toxicology and Risk Assessment   | U Mass Lowell             | 70% P<br>50% A  | T   | Enrollment Svcs (978) 934-2700 (http://www.uml.edu/DCE)    |
| 2018                     | Wetlands Assessment and Field Techniques  | U Mass Amherst            | 70% P<br>50% A  | Т   | Enrollment Svcs (978) 934-2700 (http://www.uml.edu/DCE)    |
| 1222                     | Innovative Approaches For Bedrock Site Characterization   | UNH                       | 5               | T   | Kimberly Newman (603) 862-0832                             |
| 1307                     | EOS/NR 744/844 – Biogeochemistry  | UNH                       | 22 max.         | T   | See UNH website for registration                           |
| 1475                     | Intro to ArcGIS 10.1  | UNH                       | 18              | T   | Sharon.Hughes@unh.edu                                      |
| 2017                     | The Dynamic Earth   | UNH                       | 58 max          | T   | See UNH website for registration                           |
| 1362                     | Smart Remediation Technologies  | VeruTEK                   | 8               | T   | Shaaron Syrene (860)242-9800x306                           |
| 1390                     | Green Technologies for the Environment  | VeruTEK                   | 10              | T   | Shaaron Syrene (860)242-9800x306                           |
| 1493                     | In-Situ Remediation   | VeruTEK                   | 6               | T   |  |
| 1463                     | Virtual Ground Water Academy: Slug Testing Course   | Virtual GW<br>Academy     | 4               | Т   | www.vgwacademy.com   |
| 1635                     | Visual Sample Plan (VSP) Online Training  | VSP Training LLC          | 32              | T   | https://vsp-training.teachable.com                         |
| 1641                     | Applied Groundwater Modeling using MODFLOW Flex   | Waterloo<br>Hydrogeologic | 21              | Т   | https://www.waterloohydrogeologic<br>.com/                 |
| 1660                     | Applied Groundwater Modeling using MODFLOW Flex   | Waterloo<br>Hydrogeologic | 21              | Т   | https://www.waterloohydrogeologic<br>.com/                 |
| 1119                     | Site Assessment and Remediation   | Worcester                 | 70% P           | T   | Radesha Thuraisingham                                      |

| Board's<br>Course<br>No. | Course Name  | Presented By  | Credits<br>(Cr) | Category R= regulatory T= technical DEP= DEP course | Contact   |
|--------------------------|--|---|-----------------|---|---|
|                          |  | Polytechnic Institute                                       | 50% A           |   | (503) 831-5530<br>www.wpi.edu   |
| 1134                     | Aquifer Test Analysis/Well Hydraulics                                    | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1135                     | Environmental Geophysics   | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1136                     | Ground Water Flow Modeling using MODFLOW                                 | Wright State Univ. Center for Ground Water Management       | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1137                     | Ground Water Hydrology   | Wright State Univ. Center for Ground Water Management       | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1138                     | Site Remediation   | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1139                     | Soil and Ground Water Contamination                                      | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1140                     | U.S. Regional Hydrogeology   | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1141                     | Water and the Environment  | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |
| 1145                     | Organic Chemistry: Fundamentals of Fate & Transport of Organic Chemicals | Wright State Univ.<br>Center for Ground<br>Water Management | 12 pass         | Т   | Lauryl Lefebvre (937) 775-3649  IRIS@wright.edu  http://iris.wright.edu |

## LIST #3. COURSES PREVIOUSLY APPROVED BUT REPORTED TO BE NO LONGER OFFERED.

| D 11    | C N   | D                   | G. 114  | G-4                     |  |
|---------|---|---------------------|---------|-------------------------|--|
| Board's | Course Name   | Presented By        | Credits | Category                |  |
| Course  |   |                     | (Cr)    | R= regulatory           |  |
| No.     |   |                     |         | C= core<br>T= technical |  |
|         |   |                     |         | DEP= DEP                |  |
|         |   |                     |         |                         |  |
| 1359    | AEG Spring Symposium 2008   | AEG                 | 50%     | T T                     |  |
|         |   |                     |         |                         |  |
| 1477    | 29 <sup>th</sup> Annual International Conference on Soils, Sediments, and Water                               | AEHS Foundation     | various | T                       |  |
| 1237    | Estimating Times of Remediation Associated with Monitored Natural Attenuation and Contaminated Source Removal | AIPG                | 16      | Т                       |  |
| 1255    | Practical Geosciences Ethics: Elements and Examples   | AIPG                | 8       | T                       |  |
| 1256    | A Short Course in Hydrogeological Applications of Environmental Geophysics Technologies                       | AIPG                | 8       | T                       |  |
| 1262    | A Practical Approach For Assessing Upward Vapor Intrusion Risk  | AIPG                | 4       | T                       |  |
| 1263    | Selection and Design of Groundwater Circulation Well Technology   | AIPG                | 4       | T                       |  |
| 1469    | Fractured Rock Hydro and Geophysics   | AIPG                | 8       | T                       |  |
| 1490    | Introduction to GIS for Environmental Applications  | AIPG                | 8       | T                       |  |
| 1537    | Interpretation of Surficial Geologic Maps to Develop Conceptual Site Models                                   | AIPG                | 8       | T                       |  |
| 1550    | New England Aquifers: Elusive and Complex   | AIPG                | 2       | T                       |  |
| 1058    | Interpretation of Analytical Results I  | Alpha Analytical    | 4       | T                       |  |
|         | ·   | Labs                |         |                         |  |
| 1086    | Organic Method Selection  | Alpha Analytical    | 4       | T                       |  |
|         |   | Labs                |         |                         |  |
| 1087    | Inorganic Method Selection  | Alpha Analytical    | 4       | T                       |  |
|         |   | Labs                |         |                         |  |
| 1024    | Risk Based Corrective Action (RBCA) Applied at Petroleum Release<br>Sites                                     | ASTM                | 7       |                         |  |
| 1042    | Environmental Site Characterization   | ASTM                | 24      |                         |  |
|         |   |                     | all or  |                         |  |
|         |   |                     | nothing |                         |  |
| 1225    | Data Quality Management Fall 2002 Conference  | AWMA-NES            | Various | T                       |  |
| 1321    | Vapor Intrusion: The Next Great Environmental Challenge   | AWMA                | Various | T                       |  |
| 1346    | Vapor Intrusion: Conference & Courses   | AWMA                | Various | T                       |  |
| 1261    | Remediation of Chlorinated and Recalcitrant Compounds Conf  | Battelle            | 50%     | T                       |  |
| 1245    | Innovative Technologies for Remediation of Contaminated<br>Groundwater and Soil                               | C3 Environmental    | 4       | Т                       |  |
| 1111    | An Intro to Surficial Geology in Massachusetts & Geologic History of Cape Cod                                 | CEE                 | 16      | Т                       |  |
| 1217    | Soil Profiles and Seasonal Ground Water Conditions  | CEE                 | 8       | T                       |  |
| 1349    | Vapor Intrusion: Sampling, Analytical Methods, and Quality Assurance  | Con-test Analytical | 2       | T                       |  |

| 1031  | Remediation of Hazardous Waste Sites  | Ctr. For Professional<br>Advancement | 18 | T     |  |
|-------|---|--------------------------------------|----|-------|--|
| 1032  | Treatment of Contaminated Soil & Rock   | Ctr. For Professional<br>Advancement | 18 | T     |  |
| 1033  | Applied Hydrogeology in Environmental Management  | Ctr. For Professional<br>Advancement | 18 | T     |  |
| 1001  | Understanding Subparts C & D of the MCP   | DEP and the LSPA                     | 8  | R/C   |  |
| 1001A | Understanding the Massachusetts Contingency Plan  | DEP and the LSPA                     | 8  | R/C   |  |
| 1002A |   |                                      |    |       |  |
| 1002  | Understanding Subparts I and J of the MCP   | DEP and the LSPA                     | 8  | R/C   |  |
| 1004  | Waste Site Cleanup Program – Learning From Experience   | DEP and the LSPA                     | 8  | R/C   |  |
| 1009  | Innovative Field Assessment Technologies Forum  | DEP and the LSPA                     | 4  | T     |  |
| 1044  | MCP Environmental Risk Characterization   | DEP and the LSPA                     | 6  | R/C   |  |
| 1045  | Remediation Waste and Remedial Wastewater Management  | DEP and the LSPA                     | 6  | R/C   |  |
| 1085  | Beyond TPH – Understanding & Using the New VPH/EPH Approach   | DEP and the LSPA                     | 8  | Т     |  |
| 1112  | Understanding & Using Activity & Use Limitations & Public   | DEP and the LSPA                     | 8  | R/C   |  |
|       | Involvement Requirements of the MCP   |                                      |    |       |  |
| 1152  | Environmental Sampling Analysis and Data Usability  | DEP                                  | 12 | DEP-T |  |
| 1158  | 1999 Massachusetts Contingency Plan Revisions and Case Studies  | DEP/LSPA                             | 8  | DEP-R |  |
| 1167  | Demonstrating Compliance with the MCP through the Conceptual  | DEP                                  | 12 | DEP-R |  |
| 110,  | Model Approach  |                                      |    |       |  |
| 1189  | The MA DEP Petroleum Analytical Methods: what Environmental   | DEP and ITLA                         | 4  | DEP-R |  |
|       | Professionals Need to Know about VPH, EPH, and APH  |                                      | 4  | T     |  |
| 1190  | The MCP Audit – A Case Study Approach   | DEP                                  | 2  | DEP-R |  |
| 1193  | Addressing Indoor Air Contamination: Measurements and Models  | DEP                                  | 6  | DEP-R |  |
| 1207  | The MCP Audit – A Case Study Approach   | DEP                                  | 4  | DEP-R |  |
| 1211  | Analytical Data Enhancement Program   | DEP                                  | 4  | DEP-R |  |
| 1244  | UMASS Workshop 6 – Implementing Data Enhancement Policy   | DEP                                  | 2  | DEP-R |  |
| 1294  | Method 2 Risk Characterization  | DEP                                  | 4  | DEP-R |  |
| 1295  | Impact of Wetland Regulations on MCP Site Remediation   | DEP                                  | 1  | DEP-R |  |
| 1303  | Technical Updates to Ecological Risk Assessment   | DEP                                  | 4  | DEP-R |  |
| 1309  | 2006 Massachusetts Contingency Plan Revisions   | DEP                                  | 4  | DEP-R |  |
| 1323  | Down-Gradient Property Status: Practices and Pitfalls   | DEP                                  | 3  | DEP-R |  |
| 1333  | A Different Path Through the MCP  | DEP                                  | 4  | DEP-R |  |
| 1334  | eDEP Demonstration  | DEP                                  | 1  | DEP-R |  |
| 1343  | Professional Ethics, Professional Conduct & Environmental Professions                                   | DEP                                  | 3  | DEP-R |  |
| 1343  | Critical Exposure Pathways Workshop   | DEP                                  | 3  | DEP-R |  |
| 1344  | Regulatory Expectations & Guidelines for the Vapor Intrusion Pathway                                    | DEP                                  | 2  | DEP-R |  |
|       | MCP Representativeness Evaluations & Data Usability Assessments   | DEP                                  | 8  | DEP-R |  |
| 1348  | WERO Night, Recognizing Release Notifications and Entering &  |                                      | 2  |       |  |
| 1356  |   | DEP                                  | 2  | DEP R |  |
| 1358  | Terminating Remedy Operation Status  NERO Night, Regulatory Expectations & Guidelines for Notifications | DEP                                  | 2  | DEP-R |  |
|       | & Immediate Response Actions: 2 & 72-hour Notifications   |                                      |    |       |  |

| 1262  | The Francisco Standard of Cons. Wilet Door It Moor Tedors on                      | DED                                | 1 2  | DED D  |  |
|-------|---|------------------------------------|------|--------|--|
| 1363  | The Evolving Standard of Care: What Does It Mean Today or Tomorrow                | DEP                                | 3    | DEP-R  |  |
| 1367  | Recognizing Release Notifications & Avoiding Common Problems                      | DEP                                | 2    | DEP-R  |  |
| 1307  | After Recording/Registering AULs  | DLI                                |      | DLI -K |  |
| 1368  | Improving MCP Compliance—Navigating eDEP & Managing RTNs                          | DEP                                | 2    | DEP-R  |  |
| 1387  | Managing Risk in Contaminated Wetlands  | DEP                                | 2    | DEP-R  |  |
| 1388  | The Revised CAM, What You Need to Know  | DEP                                | 4    | DEP-R  |  |
| 1389  | AULs: Achieving Compliance and Demystifying DEP Enforcement of GLc21E and the MCP | DEP                                | 2    | DEP-R  |  |
| 1394  | MCP Remediation Waste Management  | DEP                                | 8    | DEP-R  |  |
| 1416  | WERO Technical Program – CRA and the Little Dig                                   | DEP                                | 2    | DEP-R  |  |
| 1498  | 2014 MCP Regulatory Reform Training Initiative                                    | DEP                                | 6    | DEP-R  |  |
| 1041  | Soil & Groundwater Contamination and Subsurface Hydrology                         | Draper Aden Env.<br>Modeling, Inc. | 16   | T      |  |
| 1170  | Environmental Forensics   | East Coast                         | 8    | T      |  |
|       |   | Engineering                        | +3.5 |        |  |
| 1072  | Management of Petroleum-Contaminated Soils  | EBI                                | 8    | T      |  |
| 1127  | Licensed Site Professional Waste Treatment Via Thermal Desorption                 | EBI                                | 8    | T      |  |
| 1143  | Introduction, Notifications & Preliminary Response Actions                        | EBI                                | 4    | R      |  |
| 1144  | Comprehensive Response Actions & Related Activities                               | EBI                                | 4    | R      |  |
| 1229  | Analysis of Whole Air Samples in Summa Passivated Stainless Steel                 | EBI                                | 4.5  | Т      |  |
|       | Canisters   |                                    |      |        |  |
| 1246  | MCP Regulatory Interfaces   | EBI                                | 8    | R      |  |
| 1277  | Water Resources Regulations and Permit Requirements                               | EBI                                | 4    | R      |  |
| 1015  | Analytic Element Modeling of Groundwater Flow                                     | Env. Education                     | 21   | T      |  |
|       |   | Enterprises                        |      |        |  |
| 1016  | Introduction to Health Risk Assessment  | Env. Education                     | 21   | T      |  |
|       |   | Enterprises                        |      |        |  |
| 1016A | Introduction to Health Risk Assessment (Replaces 1016)                            | Env. Education                     | 16   | T      |  |
|       | •   | Enterprises                        |      |        |  |
| 1017  | Remediation Technologies  | Env. Education                     | 21   | R      |  |
|       |   | Enterprises                        |      |        |  |
| 1018  | MINTEQ Modeling of Water/Rock Interactions  | Env. Education                     | 21   | R      |  |
|       |   | Enterprises                        |      |        |  |
| 1019  | Environmental Chemistry & Chemistry Fundamentals                                  | Env. Education                     | 21   | T      |  |
|       |   | Enterprises                        |      |        |  |
| 1020  | Geochemical processes in Groundwater Movement                                     | Env. Education                     | 21   | T      |  |
|       |   | Enterprises                        |      |        |  |
| 1021  | Fractured Rocks: Characterization, Flow & Transport                               | Env. Education                     | 21   | R      |  |
|       |   | Enterprises                        |      |        |  |
| 1022  | Hydrogeology & Practice   | Env. Education                     | 15   | T      |  |
|       |   | Enterprises                        |      |        |  |
| 1023  | Assessment & Remediation of Petroleum Hydrocarbon Releases                        | Env. Education                     | 17   | T      |  |

|      |   | Enterprises               |      |     |  |
|------|---|---------------------------|------|-----|--|
| 1129 | Ecological Risk Assessment  | Env. Education            | 16   | T   |  |
| 1129 | Leologicai Kisk Assessment  | Enterprises               | 10   | 1   |  |
| 1166 | Applied Hydrogeochemistry   | Environ'l Educ.           | 14   | T/R |  |
|      |   | Enterprises, Inc          |      |     |  |
| 1194 | Inorganic Contaminant Fate and Transport  | Environmental             | 21   | T   |  |
|      |   | Education                 |      |     |  |
|      |   | Enterprises, Inc.         |      |     |  |
| 1206 | Hydrocarbon Remediation in the 21 <sup>st</sup> Century – How to recover free             | Env. Education            | 16   | T   |  |
|      | product, manage MTBE and more   | Enterprises               |      |     |  |
| 1159 | Applied Model Calibration and Uncertainty Analysis  | Environmental Simulations | 22.5 | T   |  |
| 1142 | In Situ Permeable Reactive Barriers: Application & Deployment                             | EPA/ITRC/RTDF             | 13   | T   |  |
| 1265 | Phytotechnologies Workshop - Organic  | EPA                       | 8    | T   |  |
| 1266 | Phytotechnologies Workshop - Inorganic  | EPA                       | 6    | T   |  |
| 1291 | National Corrective Action Conference 2005  | EPA                       | 50%  | T   |  |
| 1393 | RCRA Corrective Action Training: Getting to Yes! Strategies for Achieving the 2020 Vision | EPA                       | 50%  | T   |  |
| 1126 | Remediation Technologies for VOCs in Soil & GW including Soil                             | EPOC                      | 8    | T   |  |
|      | Vapor Extraction, Air Sparging, Bioremediation & Natural Attenuation                      |                           |      |     |  |
| 1130 | Monitored Natural Attenuation for Ground Water  | ERG/EPA                   | 14   | T   |  |
| 1209 | Hydrology of Fractured Rock: Characterization, Monitoring,                                | Fractured Rock            | 24   | T   |  |
|      | Assessment & Remediation  | Educational Services      |      |     |  |
| 1123 | Geoprobe Systems Direct Push Days 1998  | Geoprobe Systs, Inc       | 6    | T   |  |
| 1101 | Toxicology for Non-Toxicologists  | Government                | 13   | T   |  |
|      |   | Institutes                |      |     |  |
| 1102 | Environmental Sampling & Data Analysis  | Government                | 13   | T   |  |
|      |   | Institutes                |      |     |  |
| 1175 | Chemistry for Non-Chemists  | Government                | 16   | T   |  |
|      |   | Institutes                |      |     |  |
| 1176 | Sampling & Data Analysis Institute: Long Course   | Government                | 26   | T   |  |
| 1177 | Constitute 0 Data April 2's Just's 400 Class Constitution                                 | Institutes                | 1.5  | T   |  |
| 1177 | Sampling & Data Analysis Institute: Short Course  | Government<br>Institutes  | 15   | T   |  |
| 1191 | The Site remediation & Restoration Course   | Government                | 15   | T   |  |
|      |   | Institutes Division,      |      |     |  |
|      |   | ABS Group, Inc.           |      |     |  |
| 1247 | How to use Surfer Software  | GroundwaterSoftwar        | 2.5  | T   |  |
|      |   | e.com                     |      |     |  |
| 1248 | Aquifer Test Analysis using the software AquiferTest                                      | GroundwaterSoftwar        | 2.5  | T   |  |
|      |   | e.com                     |      |     |  |
| 1258 | Visual Modflow 1  | GroundwaterSoftwar        | 3    | T   |  |
|      |   | e.com                     |      |     |  |

| 1259  | Environmental Statistics Using WQStat Plus   | GroundwaterSoftwar e.com                  | 2.5      | T     |  |
|-------|--|---|----------|-------|--|
| 1271  | Geochemistry using AquaChem  | GroundwaterSoftwar e.com                  | 2.5      | T     |  |
| 1273  | A Method for Reviewing Pumping Test Evaluations  | Groundwater<br>Software.com               | 1        | T     |  |
| 1216  | Innovative Remedial Technologies   | H2O Technologies                          | 4        | T     |  |
| 1366  | New England Intercollegiate Geological Conference (NEIGC 2008)                                       | Harvard University & Westfield State Coll | 50%      | T     |  |
| 1133  | Regulatory Consideration at Brownfields Sites  | Hidell-Eyster Tech.<br>Services, Inc.     | 4        | R     |  |
| 1306  | Soil Vapor Monitoring, Vapor Intrusion, and Indoor Air: A Workshop                                   | HMPGA                                     | 6        | T     |  |
| 1132  | Subsurface Barrier Technologies  | International Business Communications     | 13       | T     |  |
| 1168  | Workshop on VPH, EPH, and APH  | ITLA/DEP                                  | 7        | DEP-T |  |
| 1028  | Intrinsic Remediation  | INET                                      | 14       | T     |  |
| 1040  | In Situ & On Site Bioremediation   | INET                                      | 12       | T     |  |
| 1047  | Vacuum Extraction for Site Restoration   | INET                                      | 15       | T     |  |
| 1218  | UXO Basic Training   | ITRC                                      | 12       | T     |  |
| 1105  | Natural Attenuation of Chlorinated Solvents in Groundwater-Day 1                                     | ITRC                                      | 8        | T     |  |
| 1106  | Natural Attenuation of Chlorinated Solvents in Groundwater-Day 2                                     | ITRC                                      | 8        | T     |  |
| 1171  | Accelerated Bioremediation of Chlorinated Solvents   | ITRC/RTDF                                 | 15       | T     |  |
| 1299  | MTBE & TBA: CSA and Successful GW Remediation  | ITRC                                      | 19       | T     |  |
| 1046A | A Short Course in Statistics   | LSPA                                      | 8        | T     |  |
| 1131  | Coal Ash/Wood Ash Background Exemption   | LSPA                                      | 4/4      | T/R   |  |
| 1156  | Chemical Analyses: QA/QC   | LSPA/ITLA                                 | 8        | T     |  |
| 1169  | Assessment & Management of MTBE-Impacted Sites   | LSPA                                      | 16       | T     |  |
| 1214  | Principles and Field Techniques for Characterizing Contaminant<br>Migration in Fractured Rock        | LSPA                                      | 8        | T     |  |
| 1221  | Advanced Petroleum Forensics Geochemistry  | LSPA                                      | 8        | T     |  |
| 1221a | Environmental Chemistry and the Emergence of Forensic<br>Geochemistry-Day 1                          | LSPA                                      | 8        | T     |  |
| 1221b | Environmental Chemistry and the Emergence of Forensic<br>Geochemistry-Day 2                          | LSPA                                      | 8        | T     |  |
| 1279  | Asbestos In Soils (AIS) Under the MCP – Awareness Training   | LSPA                                      | 4        | T     |  |
| 1283  | EnviroExpo – The following Individual Presentations only.  | LSPA                                      | 1.25 for | T     |  |
|       | Presentations 202, 204, 301, 304, 402, 403, 602, 603, 604, 702, 703, 704, 803, 804                   |   | each     |       |  |
| 1230  | Geographic Information Systems for Environmental Engineers   | Menzie-Cura &<br>Associates               | 8        |       |  |
| 1287  | Challenges in Evaluating and Managing Potential Risk From Exposure to Asbestos in Soil Under the MCP | Menzie-Cura                               | 1        | Т     |  |

| 1289  | Sediment, Surface Water, and Biota Sampling Methods                             | Menzie-Cura | 8       | T |  |
|-------|---|-------------|---------|---|--|
| 1296  | How to Get What You Need and Only What You Need from Risk                       | Menzie-Cura | 8       | T |  |
|       | Assessment  |             |         |   |  |
| 1312  | Developing Aquatic Sampling Plans for Human Health and Ecological               | Menzie-Cura | 8       | T |  |
|       | Risk Assessments  |             |         |   |  |
| 1374  | Promoting the Safe Development of Nanotechnology in Massachusetts               | MINC        | 50%     | T |  |
| 1182  | Practical Aspects of Ecological Risk Assessment                                 | NACSETAC    | 8       | T |  |
| 1210  | Applied Statistics for Environmental Professionals                              | NACSETAC    | 8       | T |  |
| 1056  | Application of Health Risk Assessment for Env'l Decision Making                 | NGWA        | 14      | T |  |
| 1054A | Treatment Technology for Contaminated Soils and Groundwater                     | NGWA        | 21      | T |  |
| 1057  | Risk Assessment for Environmental Professionals: Contaminant Fate &             | NGWA        | 14      | T |  |
|       | Transport Modeling Using the API Decision Support Software                      |             |         |   |  |
| 1057A | Risk Assessment for Environmental Professionals: Contaminant Fate &             | NGWA        | 16      | T |  |
|       | Transport Modeling Using the API Decision Support Software                      |             |         |   |  |
| 1059  | IBM PC Applications in Risk Assessment, Remediation, and Modeling               | NGWA        | 40      | T |  |
| 1060  | Fundamentals of Groundwater Geochemistry  | NGWA        | 12      | T |  |
| 1060A | Fundamentals of Groundwater Geochemistry  | NGWA        | 16      | T |  |
| 1061  | Practical Applications of Groundwater Geochemistry                              | NGWA        | 17      | T |  |
| 1061A | Applications of Groundwater Geochemistry  | NGWA        | 21      | T |  |
| 1062  | Understanding Migration, Assessment, and Remediation of Non-                    | NGWA        | 19      | T |  |
|       | Aqueous Phase Liquids   |             |         |   |  |
| 1062A | Understanding Migration, Assessment, and Remediation of Non-                    | NGWA        | 20      | T |  |
|       | Aqueous Phase Liquids(if you have taken course 1062 and are                     |             |         |   |  |
|       | submitting it for credit toward license renewal you cannot also use full        |             |         |   |  |
|       | credit from this course for license renewal)                                    |             |         |   |  |
| 1064  | Natural Attenuation for Remediation of Contaminated Sites                       | NGWA        | 12      | T |  |
| 1064A | Natural Attenuation for Remediation of Contaminated Sites                       | NGWA        | 16      | T |  |
| 1066  | Principles of Groundwater—Flow, Transport, and Remediation                      | NGWA        | 20      | T |  |
| 1149  | Assessment & Management of MTBE – Impacted Sites                                | NGWA        | 16      | T |  |
| 1163  | Comprehensive Ground Water Management Using Microsoft Access                    | NGWA        | 16      | T |  |
| 1187  | Focus Conference on MTBE & the Ground Water Rule                                | NGWA        | 50%     | T |  |
| 1196  | 2 <sup>nd</sup> International Conf. On Pharmaceuticals and Endocrine Disrupting | NGWA        | 50%     | T |  |
|       | Chemicals in Water  |             |         |   |  |
| 1269  | 2004 USEPA/NGWA Fractured Rock Conference                                       | NGWA        | 50%     | T |  |
| 1298  | 2005 Conference on Eastern Regional GW Issues                                   | NGWA        | 50% + 4 | T |  |
| 1029  | Bioremediation in the Saturated Subsurface                                      | NEC/UNH     | 8       | T |  |
| 1322  | MtBE and Other Fuel Oxygenates: Considerations for Assessment and               | NEIWPCC     | 15      | T |  |
|       | Remediation   |             |         |   |  |
| 1008  | Analytical Testing and the MCP  | NEWEA       | 4       | T |  |
| 1007  | D'.1 M (D'.1 Cl   | NEWEA       | 4       | T |  |
| 1007  | Risk Management/Risk Characterization   | NEWEA       | 4       | T |  |
| 1006  | Appropriate Sampling Plans and the MCP  | NEWEA       | 4       | T |  |
|       |   |             |         |   |  |

| 1000 |   | NEW EA (CEACE       | 0     | <b></b> | 1 |
|------|---|---------------------|-------|---------|---|
| 1090 | Subsurface Sampling: Strategies and Innovative Data Acquisition and             | NEWEA/CFAST         | 8     | T       |   |
|      | Analysis  | (Tufts U)           |       |         |   |
| 1173 | Construction in Contaminated Areas: Site Development In Compliance With the MCP | NEWEA               | 4     | T       |   |
| 1174 | Dual Phase Extraction Design & Industrial Wastewater Treatment                  | NEWEA               | 4     | T       |   |
| 1175 | Interpretation of Background Conditions as Defined in the MCP                   | NEWEA               | 4     | T       |   |
| 1215 | Improving the Quality of Site Characterization                                  | NEWMOA              | 6     | T       |   |
| 1268 | What Regulators Want – Conceptual Site Model                                    | NEWMOA              | 2     | DEP T   |   |
| 1319 | In Situ Chemical Oxidation  | NEWMOA              | 5     | T       |   |
| 1339 | Vapor Intrusion Mitigation  | NEWMOA              | 5     | T       |   |
| 1342 | Characterizing Chlorinated Solvents Sites                                       | NEWMOA              | 5.5   | T       |   |
| 1357 | Remediation of Chlorinated Solvent Sites  | NEWMOA              | 6     | T       |   |
| 1092 | Petroleum Hydrocarbons & Petroleum Hydrocarbons Measurement: A                  | New England Testing | 4     | T       |   |
| 10,2 | Presentation  | Laboratory, Inc.    |       | -       |   |
| 1095 | Environmental Analytical Methods for Organics and Metals                        | New England Testing | 8     | T       |   |
| 10,5 | 211/11/01/11/01/11/01/11/01/11/01/01/01/0                                       | Laboratory, Inc.    |       | -       |   |
| 1165 | Quality of Environmental Measurements   | New Environmental   | 8     | T       |   |
| 1105 | Quality of Environmental freasurements  | Horizons            |       | -       |   |
| 1091 | Applied Risk Characterization, ENV 5468   | Northeastern U.     | 70% P | T       |   |
| 1071 | 1.479.00 14.50 0.44.40 0.45.40 0.60   | Ctr. For Cont. Ed.  | 50% A | -       |   |
| 1096 | Applied Risk Characterization Under the MCP                                     | Northeastern U.     | 70% P | T       |   |
| 10,0 | 1 Approve Fullish Change of the Full Full Full Full Full Full Full Ful          | Ctr. For Cont. Ed.  | 50% A | -       |   |
| 1153 | Activity And Use Limitations Under the MCP                                      | Northeastern U.     | 70% P | R       |   |
|      |   | Ctr. For Cont. Ed./ | 50% A |         |   |
|      |   | LSPA/HealthPro      |       |         |   |
|      |   | Cons                |       |         |   |
| 2001 | Applied Groundwater Hydrology, ENV 5632   | Northeastern U.     | 70% P | T       |   |
|      | ,   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2002 | Chemistry for Hazardous Waste Managers, ENV 5232                                | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2003 | Environmental Site Evaluations, ENV 5216  | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2006 | Geology for Hazardous Waste Managers, ENV 5234                                  | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2007 | Site Remediation Principles and Technologies, ENV 5240                          | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2008 | Subsurface Exploration Techniques, ENV 5266                                     | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2010 | Underground Storage Tank Management, ENV 5426                                   | Northeastern U.     | 70% P | T       |   |
|      |   | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2011 | Understanding the Mass Contingency Plan (MCP), ENV 5637                         | Northeastern U.     | 70% P | R       |   |
|      | <u> </u>  | Ctr. For Cont. Ed.  | 50% A |         |   |
| 2015 | Applied Hydrogeology  | Northeastern U.     | 70% P | T       |   |

|       |   | Ctr. For Cont. Ed.         | 50% A   |        |  |
|-------|---|----------------------------|---------|--------|--|
| 2005  | Environmental Risk Assessment, ENV 5432   | Northeastern U.            | 12 pass | T      |  |
| 2005  | Environmental rask rissessment, Ervi 5 152  | Ctr. For Cont. Ed.         | 8 audit | 1      |  |
| 2009  | Toxicology of Hazardous Waste, ENV 5221   | Northeastern U.            | 12 pass | T      |  |
|       |   | Ctr. For Cont. Ed.         | 8 audit |        |  |
| 2012  | Environmental Chemistry in Soil/Groundwater Sys., ENV 5233  | Northeastern U.            | 12 pass | T      |  |
|       | -   | Ctr. For Cont. Ed.         | 8 audit |        |  |
| 1433  | Northeast Private Well Symposium  | NSCI                       | 50%     | T      |  |
| 1224  | ORTs-2  | ORT-2 ISC                  | Various | T      |  |
| 1234  | Water Quality and Low Flow Sampling Seminar/Conference  | Pine Env., Inc.            | 50%     | T      |  |
| 1311  | Air Quality Sampling Technology Seminar   | Pine Env., Inc.            | 5       | T      |  |
| 1109  | Biostimulation of Aquifers Using Oxygen Releasing Compounds and                                   | Regenesis                  | 4       | T      |  |
|       | other Additives   | Bioremediation             |         |        |  |
| 1109A | Biostimulation of Aquifers Using Oxygen Releasing Compounds and                                   | Regenesis                  | 8       | T      |  |
|       | other Additives.  | Bioremediation             |         |        |  |
| 1200  | Accelerated Natural Attenuation in Bedrock and Formations with                                    | Regenisis                  | 5       | T      |  |
|       | Reduced Pemeability   |                            |         |        |  |
| 1274  | Advanced Technologies for Clean-up of Brownfield Properties                                       | Regenesis                  | 2.5     | T      |  |
| 1297  | In-situ Chemical Oxidation Methods, Strategies and Applications                                   | Regenesis                  | 2       | T      |  |
| 1418  | Integrated Site Remediation   | Regenesis                  | 4       | T      |  |
| 1113  | Chemical Risk Management  | Risk Assessment            | 32      | T      |  |
| 1007  | D'.1 A M.d. 1.  | Corporation                | 4       | T      |  |
| 1097  | Risk Assessment Methods   | Rizzo Assoc., Inc.         | 4       | T<br>T |  |
| 1098  | Groundwater Flow and Contaminant Transport in Bedrock Aquifers                                    | Rizzo Assoc., Inc.         | 4       |        |  |
| 1290  | Groundwater Flow and Contaminant Transport  | Shaw                       | 4       | T      |  |
| 1251  | Pumping-Well Tests of Typical New England Aquifers and Interpretation using the USGS Program WTAQ | Southbury<br>Environmental | 8       | Т      |  |
| 1252  | Processes and Contaminants of Other Light Industries: Electronic and                              | Southbury                  | 8       | T      |  |
| 1232  | Electric Devices, Textile Processing, and Rubber Processing                                       | Environmental              | 0       | 1      |  |
| 1253  | Processes and Contaminants of the Metal Finishing, Surface Coating,                               | Southbury                  | 8       | T      |  |
| 1233  | and Dry Cleaning Industries   | Environmental              |         | 1      |  |
| 1264  | Petroleum Products  | Southbury                  | 8       | T      |  |
| 1201  | Total Colonia Troducts  | Environmental              |         | 1      |  |
| 1293  | Source, Fate and Transport of Barium, Chromium, Cobalt, Copper,                                   | Southbury                  | 8       | T      |  |
|       | Lead, Selenium and Zinc   | Environmental              |         |        |  |
| 1300  | Sources, Fate and Transport of Antimony, Arsenic, Beryllium,                                      | Southbury                  | 8       | T      |  |
|       | Cadmium, Mercury, Nickel, Silver, Thallium, Tin, Cyanide, and                                     | Environmental              |         |        |  |
|       | Perchlorate   |                            |         |        |  |
| 1011  | Field Instrumentation   | Spittler Tom               | 16      | T      |  |
| 1155  | Immunoassay Field-Testing   | Strategic Diagnostics,     | 4       | T      |  |
|       |   | Inc.                       |         |        |  |
| 1049  | Hands-on Training for Field Portable Analytical Instrumentation                                   | Tufts Univ                 | 70% P   | T      |  |
|       |   |                            | 50% A   |        |  |

|         |   | T                   | _       |       |  |
|---------|---|---------------------|---------|-------|--|
| 1070    | CEE 172 – Fate and Transport of Environmental Contaminants                        | Tufts Univ, Summer  | 70% P   | T     |  |
|         |   | Term, Audit         | 50% A   |       |  |
| 1100    | Extracting Information from Environmental Data                                    | Tufts Univ          | 12 pass | T     |  |
|         |   |                     | 8 audit |       |  |
| 1124    | Contaminated Soils Conference, 1998   | U Mass Amherst      | 4~35    | T     |  |
| 1192    | 17 <sup>th</sup> Annual International Conference on Contaminated Soils, Sediments | U Mass Amherst      | 50% of  | T     |  |
|         | and Water   |                     | hours   |       |  |
| 1172    | The 2000 Contaminated Soils, Sediments & Water Conference                         | U Mass Amherst      | TBD     | T     |  |
| 1157    | The 1999 Contaminated Soils, Sediments & Water Conference                         | U Mass Amherst      | 4~35    | T     |  |
| 1354    | Introduction to Hydrogeology – GEO-SCI 587  | U Mass Amherst      | 70%     | T     |  |
|         |   |                     | pass,   |       |  |
|         |   |                     | 50%     |       |  |
|         |   |                     | audit   |       |  |
| 1355    | UMass Amherst Triad Conference  | U Mass Amherst      | Various | T     |  |
| 1223-20 | Workshop 7 – Asbestos and the MCP   | U Mass Soils Conf.  | 3       | DEP R |  |
| 1223-20 | Workshop 12 – Vapor Intrusion   | U Mass Soils Conf.  | 3       | DEP R |  |
| 1107    | Designs for Air Impact Assessment at Hazardous Waste Sites                        | USEPA               | 21      | T     |  |
| 1116    | Sampling for Hazardous Materials  | USEPA               | 16      | T     |  |
| 1117    | Treatment Technologies for Superfund  | USEPA               | 21      | T     |  |
| 1118    | Risk Assessment Guidance for Superfund  | USEPA               | 25      | T     |  |
| 1030    | Analytical Tools for Designing Subsurface Gas Extraction and control              | UWEX                | 14      | T     |  |
|         | Systems   |                     |         |       |  |
| 1147    | Remediation by Natural Attenuation  | UWEX                | 23      | T     |  |
| 1220    | Practical Groundwater and Transport Modeling with MODFLOW                         | UConn               | 14      | T     |  |
| 1219    | Expedited Site Assessment   | UConn               | 4       | T     |  |
| 1208    | Expedited Site Assessment   | UConn               | 4       | T     |  |
| 1525    | Field Methods in Hydrology (Jan-May 2013 offering only)                           | UConn               | 12      | T     |  |
| 1398    | UMASS GEOTHERMAL HEAT PUMPS: Concept to Completion                                | U Mass Amherst      | 4       | T     |  |
| 1408    | Green Remediation Conference  | U Mass Amherst      | 50%     | T     |  |
| 1012    | DNAPL Site Characterization/Diagnosis & Remediation                               | Waterloo Centre for | 24      | T     |  |
|         | •   | GW Research         |         |       |  |
| 1014    | Disolved Organic Contaminants in Groundwater                                      | Waterloo Centre for | 24      | T     |  |
|         |   | GW Research         |         |       |  |
| 1080    | Technologies for Intrinsic and Semi-Passive In Situ Remediation of                | Waterloo Centre for | 18      | T     |  |
|         | Groundwater   | GW Research         |         |       |  |
| 1080A   | The Waterloo In Situ Course – Natural Attenuation and In Situ                     | Waterloo Centre for | 18      | T     |  |
|         | Remediation   | GW Research         |         |       |  |
| 1103    | DNAPLs in Fractured Geologic Media  | Waterloo            | 19      | T     |  |
|         | •   | Hydrogeologic, Inc. |         |       |  |
| 1128    | Groundwater Modeling: Theory and Hands-On Applications Using                      | Waterloo            | 25      | T     |  |
|         | MODFLOW-2000, MODPATH, AND MT3D   | Hydrogeologic, Inc. |         |       |  |